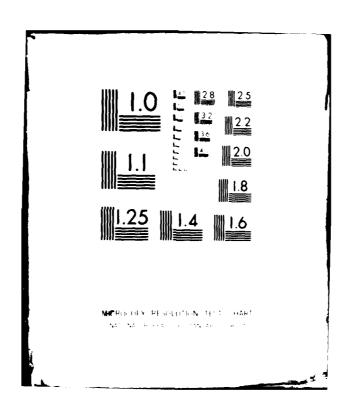
SMITHSONIAN INSTITUTION WASHINGTON DC OCEANOBRAPHY A--ETC F/6 6/6 SCIENTIFIC PERSONNEL RESOURCE INVENTORY: LIST AND INDEX TO RESE--ETC(U) JUN 72 C KERBY, A J MCERLEAN OLP/SI-REF-72-11 NL AD-A085 139 UNCLASSIFIED 10.2 A. Artisty



SCIENTIFIC PERSONNEL RESOURCE INVENTORY: LIST AND INNEX TO RESEARCH SCIENTISTS INVOLVED WITH THE ESTUARINE ENVIRONMENT, ESPECIALLY THE CHESAPEAKE BAY

Compiled by

CATHERINE KERBY AND ANDREW J. MCERLEAN

EPA

This project is supported by grants from the U.S. Army Corps of Engineers, Baltimore District, through the National Science Foundation to the Smithsonian Institution the University of Maryland and the Virginia Institute of Marine Science

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OLP/SI Reference No. 72-1i NRI Reference No. 72-83

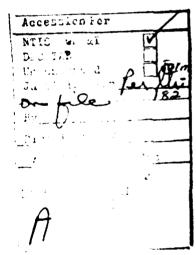
June 1972

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## INTRODUCTION

The U. S. Army Corps of Engineers, Baltimore District, has launched an extensive review of the existing, social, economic, legal and environmental condition of the Chesapeake Bay. The objective of this review is the development of a plan to provide the Corps with the basic information required to permit the proper management of the Bay and its associated environs. As a part of the biological portion of this project, an effort was made to identify and inventory researchers, especially biologists, who are active in Chesapeake Bay research. Since the number of people involved in Bay research has increased greatly during the last decade, it has become impossible for a researcher in a particular discipline to personally know all other scientists with the same interests. Prior to this report, no recorded information existed that identified the estuarine community of scientists and their research capabilities and expertise. This information is fundamental to the present assessment of existing biological knowledge and to the future prospect of providing managers with useful data for prediction of possible effects of pollutants on the biota or to solve specific biological problems. Scientists can benefit from this inventory by becoming aware of other researchers and their interests. It will enable them  $t \delta_{ij}$  cooperate on projects with experts with similiar interests and to avoid duplication of efforts.

Approximately 1200 workers were contacted in order to form this list, including members of the Chesapeake Research Consortium (CRC), the Atlantic Estuarine Research Society (AERS), the New England Estuarine Research Society (NEERS), and the National Shellfisheries Association, Inc. (NSA).

The questionnaire (pp. 186-187) which was sent to each researcher was a slightly modified version of the form which TRIGOM used in surveying personnel in preparing its second edition (May, 1971) of the <u>Directory of Marine Research Facilities and Personnel in Maine</u>. The modified questionnaire format includes the name of the researcher, highest degree, business address and phone number, and current estuarine research interests or areas of specialization in both descriptive terms and by keyword designations.

Although each individual was requested to check only three of these keywords, a number of respondents checked more. Since it was not possible to edit or qualify these choices, they were reproduced verbatim. Some editorial privilege, including condensing information, was exercised with replies to "current estuarine research interests or areas of specialization".

Replies to the questionnaires were indexed by general interest areas (letters) and subdivisions within these interest areas (numbers). Thus "B-8" indicates "(B) Biological Sciences, (8) Estuarine Ecology". Write-in notations for the category of "other" research interests were also indexed. Both

types of notations were keyed and indexed by numbers which were assigned to each specialist.

The first compilation of this list includes 644 researchers. Of this number, 314 have PhD degrees, 178 have Master's degrees, 105 have Bachelor's degrees, and nine have other types of degrees (including one with a MD and another with a VMD), and at least eight indicated that they will receive their PhD degrees shortly. Thirty-one scientists did not mention the highest degree they received (the notation -- indicates that no degree was given). In regard to the research interests as designated by keywords, the keyword "estuarine ecology" was checked by the most specialists, invertebrate biology was the next most popular category, followed by pollution research, marine biology (general), fisheries biology, environmental monitoring, and plankton ecology. Many specialists indicated interests in aquaculture, population dynamics, oceanography, biology of fishes, resource management, productivity, teaching and eduation and botany. Several researchers noted interests in micorbiology, water analysis, resource planning, physiology, commercial fishing, simulation modeling, biogeography, marine chemistry (general), parasitology, biochemistry, and sedimentology.

Fewer scientists mentioned the following interests: data systems, environmental legislation, engineering and instrumentation, pesticide monitoring, thermal properties, underwater diving, ornithology, marine geology (general), resource economics, hydrodynamics, vertebrate biology and hydrography. Only a few

specialists checked the keywords: geochemistry, physical engineering, physical properties, fish processing, health and medicine, organic chemistry, geochemistry, cold water biology, seaweed chemistry, seaweed extractives, human ecology, inorganic chemistry, marine physics (general), underwater photography, geomorphology, underwater acoustics, ocean law, navigation and seamanship, bioacoustics, geophysics, geochronology, mineralogy, and subsurface mapping. No scientists indicated specialities in geological engineering or electrical properties. One hundred and nineteen scientists specifically mentioned speciality areas other than the keyword designations provided.

This initial attempt at identifying estuarine specialists is definitely not complete. Unfortunately, a final date had to be set in order to meet a time deadline for this project. Other completed questionnaires have been received recently and should be included in an addendum to this inventory. It is recommended that this effort be continued in order that all qualified personnel be included in a future listing.

Mark Market Co.

## **ACKNOWLEDGEMENTS**

Many people cooperated in responding to the questionnaires; their help is appreciated. Special thanks are due to the Estuarine Research Federation and the National Shellfisheries Association, Inc. for the use of their membership lists in determining personnel to contact, to I. Myra Siegel (Assistant to the Director of TRIGOM) who permitted us to use their questionnaire form and who was very cooperative with regard to our efforts, and to Anna Hegenberger who typed the final compilation.

Aalto, Johan A. MCE

Director

Annapolis Field Office

Environmental Protection Agency

Annapolis Science Center

Riva Road

Annapolis, Maryland 21401

(301) 268-5038 ext. 3

E-1, E-3, F-4

Abbe, George Robert MS

Biologist

Department of Limnology

Academy of Natural Sciences of Philadelphia

Benedict Estuarine Laboratory

Benedict, Maryland 20612

(301) 274-3194

B-9, B-12, B-18

--Shellfish dynamics

--Epifaunal community studies

Abbott, Robert Tucker PhD

Dupont Chair of Malacology
Department of Mollusks
Delaware Museum Natural History
Box 3937
Greenville, Delaware 19807
(302) 658-9111
B-12

--Molluskan biology; including taxonomy, curating, sorting and housing

Adams, Donald Dick MSC
Assistant Professor
Institute of Oceanography
Old Dominion University
Hampton Boulevard
P.O. Box 6173
Norfolk, Virginia 23508
(703) 489-8000 ext. 456

C-1, C-3, E-3

-- Decomposition of organic matter, especially plankton

-- Carbon and nitrogen budgets

-- Gas chromatography of trace gases dissolved in sea water

-- Cycles of trace metals

-- Cycles of low molecular weight hydrocarbons

Markey ...

5 Adams, Sidney Marshall MS
Biological Technician
Department of Commerce
National Marine Fisheries Service
3209 1/2 Arendell Street
Morehead City, North Carolina 28537

B-8

-- Energetics of fish inhabiting Zostera marina communities; including biomass sampling, respiration studies, bomb colorimetry, and food consumption studies

6 Adler, Cyrus MS
President
Offshore Sea Development Corporation
99 Nassau Street
New York, New York 10038
B-2, E-3, G-5
--Shore processes

--Use of sludge to build up sand dunes

--Shore processes
--Marshlands, including their growth and decline
--Thermal pollution
--Aquaculture of bivalves
--Biological indications of pollution

\* 7 Allen, Linda Dye BS
Faculty Research Assistant
Natural Resources Institute
University of Maryland
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext. 52

B-1, B-8, E-3, G-7

--Zooplankton; including pre-and post-operative studies of thermal pollution by an atomic power plant and biomass determinations of copepods, especially Acartia tonsa, A. clausi, and Eurytemora affinis

\*8 Allison, James Thurston

MGR Water Quality and Fish Mortality Studies 
Biologist 3

Water Quality Investigation and Enforcement Division

Maryland Department of Water Resources

11-13 Lincoln Court-Chinquapin Round Road

Annapolis, Maryland 21403

(301) 267-5675

B-1, B-5, B-8, B-9, B-12, B-13, B-17, C-1, C-9, E-1, E-3

--Pollution biology; including studies of water quality,

biota surveys, and plankton analyses

--Population studies of Orconectes virilis

Mari State Control

9 Alperin, Irwin M. MS
Executive Director
Atlantic States Marine Fisheries Commission
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036
(202) 232-6692

B-8, B-9, H-2

- --Coordination of marine fishery research and management programs carried out by the state fishery agencies of the coastal states from Maine to Florida
- --Fisheries biology, especially of species of fishes of particular interest to sport fishermen including striped bass, bluefish, weakfish, summer flounder, winter flounder and others in the vicinity of Long Island, New York and on the lower Hudson River; including studies of migratory behavior, seasonality, abundance and catch rates; investigation of the abundance and seasonality of all species of fishes inhabiting the surf zone of the south shore of Long Island, New York
- \* 10 Andersen, Aven Mayer PhD
  Assistant Professor
  Natural Resources Institute
  University of Maryland
  College Park, Maryland 20742
  (301) 454-5641

B-9, B-18, G-6

- --Fisheries biology; including dynamics of potential or currently-exploited fisheries resources of Chesapeake Bay and vicinity and studies of the beneficial uses of thermal waste in fish production
- Anderson, Franz E. PhD
  Associate Professor
  Earth Sciences
  University of New Hampshire
  Durham, New Hampshire 03824
  (603) 862-1718
  - D-1, D-8, E-2
    --Factors affecting the suspended sediment load in estuarine waters; including the effect of waves in resuspending fine-grained sediment

Andrews, Jay Donald PhD
Senior Marine Scientist
Department of Malacology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111

B-2, B-8, B-9, B-12

-- Fouling Organisms

--Biological oceanography; experience with Corps on dams, dredging, etc.

--Studies on <u>Dermocystidium</u> and <u>Minchinia nelsoni</u> (MSX)
--Molluskan biology; including genetics - breeding and selection for superior oysters (disease resistance, growth quality, breeding characteristics); adult and larval ecology; taxonomy; setting, epizootology
--Management of shellfisheries

13 Arndt, Rudolf G. PhD
Research Biologist
Ichthyological Associates
Box 35, R.D. 2
Middletown, Delaware 19709
(302) 378-8622

A-1, B-1, B-8

--Distribution and abundance of Callinectes sapidus

\* 14 Arnold, Stephen Lloyd BA
Graduate Student
Department of Geography and Environmental Engineering
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300

B-1, D-8, Palynology

--Relation of the plant geography of the drainage basin of the Chesapeake Bay to the distribution of pollen in its waters and surface sediments

Bailey, David Sandburg BS
Chief, Biology Section
Virginia State Water Control Board
4010 West Broad Street
Richmond, Virginia 23230
(703) 770-5518

B-5, B-8, B-17, C-7, C-9

--General monitoring of the tributaries of the Bay in Virginia

--Fish kill and oil spill investigations in the Chesapeake Bay --Coordination of estuarine activities with the Coast Guard, Army Corps of Engineers, and Virginia Institute of

Marine Science

16 Baptist, John P. MS
Fishery Biologist
Department of Commerce
NOAA
National Marine Fisheries Service
Beaufort, North Carolina 28516
(919) 728-4595

B-8, E-1, Radioecology

--Evaluation of possible radiological effects of nuclear power plant emissions on aquatic resources

\* 17 Barnard, Robert Joseph MS
Supervisory Microbiologist
Bureau of Laboratories
D.C. Department of Human Resources
300 Indiana Avenue, N.W.
Room 6012
Washington, D.C. 20001
(202) 629-2108

B-10, B-11, B-13

--Microbiology; including a survey of areas of the Chesapeake Bay for <u>Vibrio parahaemalyticus</u>

\* 18 Barnard, Thomas Alexander MA
Assistant Marine Scientist
Department of Ecology - Pollution
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-5124 ext. 35

B-12, C-7, E-3

--Pesticide monitoring and biological effects (including PCB's)

--Bio-assay methods and techniques using a variety of estuarine pollutants such as heavy metals, oil and pesticides

--Physiological effects on invertebrates of pollutants at sublethal levels

19 Barrett, B.E.

PhD

Supervisor Marine Fisheries

State of New Hampshire Fish and Game

P.O. Box 101

Rye, New Hampshire 03870

B-1, B-9, B-12

--Research and management of estuarine species such as

Mya and Crassostrea in the Hampton and Great Bay
estuaries

--Studies of lobsters and other exploitable marine resources

20 Bartley, Clara H. PhD
Research Associate in Microbiology
Microbiology
University of New Hampshire
Spaulding Life Science
Durham, New Hampshire

B-8, B-13, E-3

--Microbiological pollution of New Hampshire waters; including the effect of increasing numbers of waste disposal plants on microbiological pollution --Shellfish and their distribution in estuarine waters

--Distribution of Vibrio parahaemolyticus

\* 21 Bason, William Holger MS
Project Leader Eddystone Survey
Ichthyological Associates
Box 349
2 S. Meadow Street
Middletown, Delaware 19709
(302) 378-8652

B-5, B-8, B-9
--Fisheries biology; including seasonal changes in
 populations, age, growth, food habits and
 sampling techniques, especially for Morone saxatilis

22 Bauereis, Elizabeth Ingram PhD
Assistant Professor
Biological Sciences College Parallel
University of Delaware
Delaware Tech Community College
Georgetown, Delaware 19948
(302) 856-7111

B-12, B-16, C-2

--Physiology of estuarine animals; including responses of marine mollusks to temperature, desiccation and factors influencing respiration

23 Bayley, Suzanne Elizabeth PhD
Instructor
Department of Environmental Engineering
University of Florida
Gainesville, Florida 32601
(904) 392-0836

B-8, G-5, H-2

-- Analysis of the productivity of Florida wetlands with emphasis on the interaction of the marsh and the activities of man

Beal, Kenneth Lee MA Marine Biologist Environmental Resources Branch Corps of Engineers, Baltimore District Baltimore, Maryland 21203 (301) 962-4713

B-8, B-9, E-2

-- Fisheries biology

--Navigation

-- Ecological interrelationships in Chesapeake Bay tributaries

\* 25 Bean, George A. PhD Associate Professor Botany Department University of Maryland College Park, Maryland 20740 (301) 454-3816 B-6, B-13, E-3

--Diseases of rooted aquatic plants in the Rhode River

26 Bechtel, Timothy Joseph MA Research Fellow Zoology Department North Carolina State University Raleigh, North Carolina 27607 (919) 755-2741

B-8, E-3, G-5

--Modeling persistent pesticide residues in estuarine ecosystems

-- Effects of low level pesticide stress on estuarine productivity

-- Chronic effects of general pollutants on fish and commercial invertebrates in estuaries

Belick, Francis Peter 27 MS Biology Instructor Biology Department East Carolina University P.O. Box 2577 Greenville, North Carolina 27834 (919) 758-6718 B-5, B-12, B-15

-- Internal anatomy and ecology of parastic copepods

The Robert Control of

\* 28 Bender, Filmore E. PhD

Associate Professor

Agricultural and Resource Economics Department
University of Maryland

College Park, Maryland 20742

(301) 454-3801

A-1, E-3, G-1, G-5, G-6, H-1, H-2, H-3

--Model of streams flowing into the Chesapeake Bay

Assistant Director
Assistant Director
Applied Marine Science
Virginia Institute Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111

E-3, General ecology
--Eutrophication
--Water quality criteria
--Pollution biology

30 Berkson, Harold PhD
Specialist
Environmental Policy
Congressional Research Service
Library of Congress
Washington, D.C. 20540
(202) 426-5881

B-1, B-8, B-16, E-3, G-2

--Estuarine ecology as influenced by pollution and other forms of habitat modification

--Considerations of legislation, institutional policies and programs, and the interacting factors of socio-economics with ecology

Bettle, James F.

Head
Chesapeake Bay Ecological Program Office
National Aeronautics and Space Administration
Wallops Station
Wallops Island, Virginia 23337
(703) 824-3411 ext. 366
A-2, G-1, Remote sensing applications

-- Identification, demonstration, and evaluation of practical applications of remote sensing from aircraft and spacecraft

W. Ridery at .

32 Bhattacharyya, Rameswar PhD
Associate Professor
Naval Systems Engineering
U.S. Naval Academy
Annapolis, Maryland 21402
(301) 267-3871
F-3, G-6
--Wave resistance of marine vehicles

\* 33 Bickley, William E. PhD
Professor
Department of Entomology

University of Maryland

College Park, Maryland 20742 (301) 454-4239

B-8, B-12, Entomology

--Entomology; including developing an inventory of insect species in regions of the Chesapeake Bay; studying the relationship of variations in insect populations to differences in environmental, physical and chemical factors; and determining the role of insects in providing food for other animals

34 Biggs, Robert Bruce PhD
Associate Professor
Department of Geology
University of Delaware
Newark, Delaware 19711
(302) 738-2813

C-2, C-8, E-3

-- Trace metal geochemistry of waters and sediments

35 Binmore, Tom V. BA, BS
Appraiser
National Fisherman Magazine
Camdon. Maine

(617) 426-2712
A-2, B-1, B-2, B-8, B-17, B-18, B-19, C-1, C-2, C-6, D-1, D-8, E-3, G-2, H-2
--Inshore fisheries biology

Associate Professor
Civil Engineering Department
University of Maryland
College Park, Maryland 20742
(301) 454-2440

C-3, C-9, E-3

--Determinations of concentrations of mercury, gold, and cadmium in Chesapeake Bay oysters.

PhD 37 Bishop, John Watson Associate Professor Department of Biology University of Richmond Richmond, Virginia 23173 (703) 285-6275

B-17, B-19, G-5

--Plankton trophic ecology

--Systems analyses of primary production

--Intraspecific competition of benthic suspension feeders

38 Black, Dianne Elizabeth Biological Laboratory Technician Environmental Protection Agency National Marine Water Quality Laboratory P.O. Box 222 West Kingston, Rhode Island 02892 (401) 789-9751 ext. 53

B-2, B-9, E-3

--Fisheries biology; including culturing and rearing from egg to adult; hormone induced spawning; effects of elevated temperatures on all life stages, especially of winter flounder, scup, tautog, and mummichog; and effects of oxygen-depleted water on eggs and larvae

39) Black, Robert Earl Lee PhD Professor of Biology and Marine Science Department of Biology and School of Marine Science College of William and Mary Williamsburg, Virginia 23185 (703) 229-3000 ext. 284

B-12, C-2, G-6

-- Chemical embryology of invertebrates, especially scyphozoan coelenterates

PhD Blanquet, Richard Steven Assistant Professor Department of Biology Georgetown University 37th and O Streets, N.W. Washington, D.C. 20007 (202) 625-4126

B-1, B-7, B-12, C-2

--Adaptive responses of invertebrate organisms, especially Chrysora quiquecirrha, to changes in their environment, particularly with respect to temperature

--Studies of the nature and mode of action of sea nettle nematocyst toxin and the chemical basis of the feeding response in this species

Fulbright Research Fellow
Department of Zoology
University of Queensland
St. Lucia
Brisbane, Austrialia 4067

B-4, B-8, E-3
--Macrobenthos; including analysis of community structure, computer classification of "communities", and effects of seasonality and multiple-source pollution on the benthos

\* 42 Boon, David D. BS
Faculty Research Assistant
Seafood Processing Laboratory
University of Maryland
Box 351
Crisfield, Maryland 21817
(301) 968-1655

A-3, C-1

--Shellfish biology; including red discoloration of oysters and soft-shelled clams, development of byproducts from shellfish waste, and the concentrations of iron, copper, zinc, and magnesium in crabmeat

Boone, Joseph G.

Biologist III

Fisheries Management

Department of Natural Resources

Maryland Fish and Wildlife Administration

State Office Building

Annapolis, Maryland 21401

(301) 267-5361

B-8, B-9

- --Fisheries biology; including ecology, annual assessment of population level and age structure, prediction of future abundance of food fishes, monitoring of estuarine fisheries, and movements and migrations of striped bass
- 44 Borror, Arthur Charles PhD
  Associate Professor of Zoology
  Department of Zoology
  University of New Hampshire
  Spaulding Building
  Durham, New Hampshire 03824
  (604) 862-2107

B-8, B-14, Protozoology
--Systematics, ecology, and morphology of marine ciliated
Protozoa, especially benthic forms

45 Bosch, Herman F. PhD
Investigator
Marine Biological Laboratory
Woods Hole, Massachusetts 02543
(617) 548-3705 ext. 533
B-8, B-12, B-17
--Behavior and ecology of estuarine cladocerans

46 Bousfield, Edward Lloyd PhD
Chief Zoologist
Zoology Division
National Museum of Natural Sciences
Ottawa, Ontario
(413) 992-9764

B-4, B-8, B-12, Amphipod systematics
--Systematics, distribution, ecology and life history
studies of estuarine and intertidal invertebrates,
especially amphipod crustaceans of North America
--Distribution and dispersal of medium zooplankton of the

middle and St. Lawrence Estuary in Eastern Canada -- Distribution of estuarine barnacles (Cirripedia) and larval stages in Eastern Canada

47 Bowman, Thomas Elliot PhD
Curator
Division of Crustacea
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5781
B-4. B-12. B-17

1

-- Systematics of estuarine planktonic copepods

48 Boynton, Walter Raymond MS
Graduate Student
Program in Marine Science
University of North Carolina
Chapel Hill, North Carolina 27514
(919) 942-6126
B-1, B-8, B-19, C-5, H-3
--Phytoplankton productivity
--Nutrient cycling
--Carbon budgets and salt marsh production

\* 49 Bradley, Brian Patrick PhD
Assistant Professor
Department of Biological Sciences
University of Maryland
5401 Wilkens Avenue
Baltimore, Maryland 21228
(301) 455-2244

B-18, G-5
--Calanoid copepods, with an emphasis on genetic variation and various selective bay pressures on Eurytemora affinis
-12-

\*50 Brady, Derek Kingsley PhD
Associate Research Scientist
Department of Geography and Environmental Engineering
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 709

E-3, F-3, G-5

--Statistical, hydrological and hydromechanical aspects of environmental engineering problems

--Simulation of the interactions between waste discharges (particularly thermal) and their receiving waters by computer modeling techniques

\*51 Brehmer, Morris Leroy PhD
Director Environmental Operations
Environmental Control
Virginia Electric and Power Company
P.O. Box 26666
Richmond, Virginia 23261
(703) 771-3206

B-8, C-1, E-1

--Production of sufficient electrical energy to meet the needs of society in a manner which will result in a minimum impact on the environment

\*52 Briddell, Charles David BS
Engineering Consultant
335 Hill-n-Dale Drive
York, Pennsylvania 17403

A-2, F-7, H-1, H-2, H-3
--Manufacturing tools for

--Manufacturing tools for the oyster producing industry; including development of an automatic oyster shucking machine and of equipment for the oyster hatchery program

-- Consultant for re-cycling of solid wastes

53 Bridges, David W. PhD
Research Associate
TRIGOM
96 Falmouth Street
Portland, Maine 04103
(207) 773-2981 ext. 306

B-5, B-8, B-16

--Ecology; including the development and adaptation of biomedical techniques to study organisms and the determination of the relative influence of environmental parameters such as temperature and salinity in addition to the biological phenomena of age and size on the tolerance of organisms to stressful situations

--Physiological ecology of fishes; including the evaluation of the effects of stress on fish blood properties

54 Bridges, W. Leigh MS
Assistant Director
Division of Marine Fisheries
Massachusetts Department of Natural Resources
100 Cambridge Street
Boston, Massachusetts 02202
(617) 727-3193
B-8, B-9, B-18
--Estuarine ecology
--Fisheries biology: including population dynamics

--Fisheries biology; including population dynamics and anadromous fish research and development

-- Coastal alterations

--Aquaculture

-- Effects of power generation on marine resources

55 Brooks, Albert Law PhD
Oceanographer
Division of Oceanography
Navy Underwater Systems Center
Ft. Trumbull
New London, Connecticut 06320
(203) 442-0771 ext. 2679
B-17, B-18, E-2

--Pollution-studies - related problems in the Long Island, Fishers Island, Block Island Sound area --Biology of zooplankton populations

\* 56 Brooks, Arthus S. MS
Research Assistant
Department of Geography and Environmental Engineering
The Johns Hopkins University
Homewood Campus
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 286
B-8, B-17, B-19, E-1, E-3

--Phytoplankton and primary production and how they are affected by thermal discharges

Brown, James Thelbert MS
Cheif, hstuarine Studies Section
North Carolina Department of Natural and Economic
Research
Division of Commercial and Sports Fisheries
Arendell Street
P.O. Box 769
Morehead City, North Carolina 28557
(919) 726-7021

B-8, B-9, H-3
--Development of comprehensive and enforceable plans
for management of the North Carolina coastal Zone
--Administration involving state permit system for
applications to perform excavation and/or fill in
estuarine waters and marshlands

.

-14-

\*58 Brown, Russell Guy PhD
Professor
Botany Department
University of Maryland
College Park, Maryland 20742
(301) 454-3812
B-6, G-6, Plant ecology
--Taxonomy and ecology of vascular plants
--Pollution effects on the Chesapeake Bay

\* 59 Brunori, Carlo Roland BS
Watershed Manager
Water Quality Investigation and Enforcement Division
Department of Water Resources
State Office Building
Annapolis, Maryland 21401
(301) 267-5553

B-8, C-9, E-1

--Water quality investigations and enforcement work related to water pollution of Chesapeake Bay

\* 60 Brush, Grace S. PhD
Research Scientist
Department of Geography and Environmental Engineering
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 286
B-6, B-17, D-8

--Studying distributions of pollen in the water and sediment of the Chesapeake Bay and relating these distributions to the structure of vegetation surrounding the Bay and to circulation patterns within the Bay

61 Brush, Lucien M. Jr. PMD
Professor
Department of Geography and Environmental Engineering
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 1035
D-8, E-3, F-3

--Physical hydrodynamics of estuaries as they relate to nutrient loading

--Pollution in general, including sedimentation

--Hydrology --Hydraulics

--Geomorphology

The state of the s

62 Bubeck, Robert Clayton PhD
Research Associate
Department of Geological Sciences
University of Rochester
River Campus
Rochester, New York 14627
(716) 275-2410

D-2, E-2, E-3

--Geochemistry of estuaries; including geochemical processes in the water-sediment interface of coastal bays which exhibit permanent or extensive anoxic zones

--Pollution monitoring of Chesapeake Bay

63 Buck, John D. PhD
Associate Professor of Biology
University of Connecticut
Marine Research Laboratory
Noank, Connecticut 06340
(203) 536-4233

B-13, E-3, G-6

-- Effects of thermal effluents on estuarine biota

--Effects of treated sewage effluent on the microbiology and chemistry of estuarine waters

--Nutrition and ecology of marine agar-digesting bacteria

-- Production of antimicrobial compounds by marine bacteria

64 Burbidge, Richard Greig PhD
Professor
School of Fisheries
Catholic University of Valparaiso
Valparaiso
Chile

B-8

--Fisheries biology, especially of Alosa aestivalis; including distribution, growth, selective feeding, and energy transformations of the young-of-the-year in the James River, Virginia

\*65 Burchard, Robert Paul PhD
Associate Professor
Department of Biological Sciences
University of Maryland, Baltimore County
Catonsville, Maryland 21228
(301) 455-2250

B-8, B-13, B-18, E-3

--Role of bacterial flora in estuaries, especially in regard to mineralization and the cycling of matter

\*66 Burnett, Joseph Warren MD
Associate Professor
Department of Dermatology
University of Maryland
University Hospital
Baltimore, Maryland 21201
(301) 528-6098

B-1, B-10, B-12
--Chemical, anatomical, and toxiological aspects of the sea nettle and related coelenterates

Burrell, Victor Gregory PhD
Associate Marine Scientist
South Carolina Marine Resource Division
South Carolina Wildlife Department
217 Fort Johnson Road
Charleston, South Carolina 29412
(803) 795-2081 ext. 6

B-8, B-12, B-17

--Estuarine food chains, especially predator-prey relationships

--Copepod taxonomy

\* 68 Burton, Dennis Thorpe PhD
Research Assistant Curator of Limnology
Department of Limnology
Benedict Estuarine Laboratory
Academy of Natural Sciences of Philadelphia
Benedict, Maryland 20612
(301) 274-3194

B-16, C-2, E-3

--Effects of thermal loading and other stresses caused by power plant operations on subtle physiological responses of selected estuarine animals, especially on various stages of the life cycles of silversides, white perch, hogchokers, oysters, crabs, and grass shrimp

69 Bush, Louise F. PhD
Professor of Zoology
Zoology Department
Drew University
Madison, New Jersey 07940
(201) 377- 3000 ext. 369

B-1, B-12

--Systematics of Class Turbellaria (Phylum Platyhelminthes), especially Kalptorhynchia

11. \$1000 在大概等的自己

\*70 Butler, Philip A. PhD
Biologist
Research Consultant
Gulf Breeze Laboratories
Environmental Protection Agency
Sabine Island
Gulf Breeze, Florida 32561
(904) 932-5326

B-8, C-7, E-1

--National monitoring program to determine levels of pesticide residues in estuarine fish, molluscs, and sediments

\*71 Buzas, Martin A. PhD
Curator
Paleobiology
Smithsonian Institution
10th and Constitution Avenue N.W.
Washington, D.C. 20560
(202) 381-5431
B-8, B-18

-- Quantitative ecology of Foraminfera

--Justification of relationship of environmental variables with species densities in space and time

72 Byrd, Mitchell Agee PhD
Professor of Biology
Department of Biology
College of William and Mary
Williamsburg, Virginia 23185
(703) 229-3000 ext. 212
B-8, B-14, B-20

--Population dynamics of the osprey with particular emphasis on the role of environmental contaminants on productivity

\* 73 Byrne, Robert John PhD
Senior Marine Scientist
Department Head
Department of Geological Oceanography
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 38

--Coastal processes; including nearshore waves and currents, shoreline response, and dynamics of tidal inlets

74 Cable, Wayne Devere MS
Fishery Biologist
Department of Commerce
National Marine Fisheries Service
Cottage Street
Milford, Connecticut 06460
(203) 878-2450 ext. 26
B-2, B-8, B-9
--Ecology of bivalves, especially of larval forms

75 Cairnes, John Jr. PhD
Director
Center Environmental Studies
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24060
(703) 552-6780

B-18, E-3, G-1

--Effects of stress on aquatic communities -- Rapid biological information systems

76 Calabrese, Anthony PhD
Fishery Biologist (Research)
NOAA
National Marine Fisheries Service
Biological Laboratory
Milford, Connecticut 06460
(203) 878-2459

B-1, B-2, B-8, B-9, B-12, E-3

--Culturing of invertebrate organisms and studies of physiological stress when all stages of the life cycle of these organisms are exposed to environmental contaminants

\* 77 Calder, Dale Ralph PhD
Associate Marine Scientist
Department of Environmental Physiology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 33

B-1, B-8, B-12

-- Taxonomy, ecology, and life history studies of marine invertebrates, especially Cnidarians

--Control of <u>Chrysaora quinquecirrha</u> in the Chesapeake Bay

\* 78 Cargo, David Garrett MS

Research Associate

Natural Resources Institute
University of Maryland
Chesapeake Biological Laboratory
Box 38

Solomons, Maryland 20688
(301) 326-4281 ext. 33

B-8, B-12, C-4

--Invertebrate fisheries and ecology, particularly of Coelenterata and Crustacea

79 Carlson, Frank Thomas MS
Staff Assistant
Office of Regional Planning
U.S. Department of the Interior
18th and C Streets, N.W.
Washington, D.C. 20240
(202) 343-8059
B-8, H-3, Coastal zone planning

--Estuarine ecology of anadromous fishes

80 Carpenter, Edward John PhD
Assistant Scientist
Biology
Woods Hole Oceanographic Institution
Water Street
Woods Hole, Massachusetts 02543
(617) 548-1400 ext. 314
B-17, E-2, E-3
--Phytoplankton ecology
--Pollution biology

81 Carr, H. Arnold --Research Analyst
Division of Marine Fisheries
Commonwealth of Massachusetts
Box 707
Sandwich, Massachusetts 02563
(617) 888-1155

B-2, B-8, H-2
--Research and management of shellfish and finfish resources in a coastal environment seriously affected by a No. 2 fuel oil spill of a large magnitude

82 Carriker, Melbourne Romaine PhD
Director
Systematics - Ecology Program
Marine Biological Laboratory
Woods Hole, Massachusetts 02543
(617) 548-3705
B-1, B-8, B-12
--Biology of muricid gastropods, especially boring mechanism of Urosalpinx cinerea

\*83 Carter, Thomas E. BA
Biologist
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 29
B-1, C-9, E-3

\*84 Carter, Worrall Reed III MS
Biologist III
Eastern Regional Office
Maryland Department of Natural Resources
Fish and Wildlife Administration
Wye Mills, Maryland 21679
(301) 827-8122
B-9, E-1, H-2

\*85 Carver, Thomas C. Jr. BS

Pesticide Specialist
Technical Advisory Division
Department of Commerce
NOAA
National Marine Fisheries Service
Interior Building Room 2559
Washington, D.C. 20036
(202) 343-2646

--Administrative control concerned with the effects of pesticides on estuarine forms

\* 86 Casey, James F.

BS

Biologist III Fish and Wildlife Administration Maryland Department of Natural Resources State Office Building Annapolis, Maryland (301) 267-5151

B-6, B-8, B-9

-- Aquatic and marsh plant studies; including monitoring density and distribution, checking their condition and evaluating their effect on the shoreline and native organisms

-- Fisheries biology; including determining distribution, evaluating wetlands and marshes as broodstock and nursery grounds, studying the effect of dredgeand-fill on these local species, evaluating recreational and commercial fishing pressure and monitoring environmental conditions

--Hard shell clams and Bay scallops studies; including monitoring density and distribution, interrelationships with other organisms, market fluctuations, catch conditions and environmental conditions

Cassell, Harold Marvin Department of Chesapeake Bay Affairs State of Maryland State Office Building Annapolis, Maryland 21401 (301) 267-5774

B-8, H-2, Wetlands

-- Implementation of the Maryland Wetlands Law

PhD Cassin, Joseph Mathews Associate Institute Marine Science Adelphi University South Avenue Garden City, New York 11530 (516) 294-8700 B-13, B-17, B-18

-- Phytoplankton taxonomy and population dynamics --Distribution of E. coli and Streptococcus Group D

in sediments

-- Sanitary implications of small boat pollution

--Microbial ecology of Great South Bay and adjacent waters

--Correlation of in situ flourescence and bioluminescence with biotin in the New York Bight

-- Effect of dredging on phytoplankton population dynamics

Castagna, Michael

Senior Marine Scientist

Eastern Shore Laboratory

Virginia Institute of Marine Science

Wachapreague, Virginia 23480

(703) 787-3280

A-1, B-1, B-2, B-8

--Molluscan culture

Ceurvels, A. Russell

Chief of Laboratory

Division of Marine Fisheries

Commonwealth of Massachusetts

92 Fort Avenue

Salem, Massachusetts

(617) 745-3107

B-1, B-2, E-1

91 Chace, Fenner Albert Jr. PhD
Senior Zoologist
Department of Invertebrate Zoology
NMNH
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5921

B-1, B-4, B-12
--Taxonomy, morphology and distribution of decapod
Crustacea

92 Chanley, Paul MA
Biologist
Hatchery
Shelter Island Oyster Company
Box 353
Greenport, New York 11944
(516) 477-1170

A-1, B-2, B-12
--Culture techniques, identification, behavior and biology of bivalve molluskan larvae
--Mariculture of Mercenaria mercenaria, Crassostrea virginica, Homarus americanus and Nereis virens

Maria Maria Company

\* 93 Chapman, George Bunker PhD
Professor and Chairman
Department of Biology
Georgetown University
37th and O Streets N.W.
Washington, D.C. 20007
(202) 625-4126

B-1, B-5, B-8, B-12, B-13, B-15, B-20

--Fine structural studies; including changes in bacteria and other estuarine inhabitants in relation to changes in their environment and descriptions of the disease process involving bacterial and protozoan pathogens of estuarine inhabitants

\* 94 Chapoton, Robert Bruce MS
Fishery Biologist
National Marine Fisheries Service
Atlantic Estuarine Fisheries Center
Beaufort, North Carolina 28516
(919) 728-4595 ext. 55

A-1, B-9

--Fisheries biology; including population dynamics, movements, growth and catch of menhaden especially as related to resource managements for the good of commercial and sport fisheries

95 Cheek, Randall Puryear MS
Fishery Biologist
Department of Commerce
National Marine Fisheries Service
Beaufort, North Carolina 28516
(919) 728-4595

B-8, B-9, B-18

--Fisheries biology; including population dynamics of anadromous species and Atlantic menhaden and effects of estuarine alterations on marine fishery resources

96 Chesmore, Arthur P.

Research Analyst
Division of Marine Fisheries
Department of Natural Resources
Commonwealth of Massachusetts
Cat Cove Marine Laboratory
92 Fort Ave.
Salem, Massachusetts 01970
(617) 745-7667

B-8, E-1, F-6

--Assessment of the effects of thermal addition to the waters of Salem Harbor, Massachusetts, from the discharge of heated effluent from a steam generating station

97 Chestnut, Alphonse F. PhD
Director and Professor
Institute of Marine Sciences
University of North Carolina
P.O. Box 809
Morehead City, North Carolina
(919) 726-6841

A-1, B-1, B-2, B-8, B-12, E-2, E-3

--Molluscan biology; including ecology; feeding mechanisms, especially of Lamellibranchs and oyster studies

\* 98 Chew, Robert Lynn BS
Fishery Biologist II
State of Florida
Game and Fresh Water Fish Commission
5301 Glasgow Avenue
Orlando, Florida 32805
(305) 859-1098

B-1, B-8, B-9

--Fisheries biology; including nursery area residency studies of sciaenids and life history studies of sciaenids and large mouth bass

\* 99 Chittenden, Mark Eustace Jr. PhD
Associate Marine Scientist
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext · 68

B-9, B-16, B-18

--Fisheries biology; including life histories, ecological, population dynamical and behavioral studies of anadromous and estuarine fishes, especially Alosine and Serranid species

--Physiological ecology of fishes; including studies of oxygen requirements, low temperature tolerance, salinity tolerance, and effects of handling stress --Population dynamics of blue crabs

\* 100 Christensen, Darryl Jack MS
Fisheries Biologist (Research)
Department of Commerce
National Marine Fisheries Service
Oxford, Maryland 21654
(301) 226-5193

B-8, B-9, E-1

-- Finfish resource assessment

-- Estuarine ecology

W. Klasson,

\* 101 Clark, James Freeman

Instructor of Oceanography LTSC, USNR

Department of Environmental Sciences

U.S. Naval Academy

Annapolis, Maryland 21402

(301) 267-3564

B-1, B-4, B-8, B-12, E-1, E-2, E-3, G-6, G-7, G-8

--Distributions of benthic invertebrates, particu

in response to the introduction of pollutant

--Distributions of benthic invertebrates, particularly in response to the introduction of pollutants --Investigations including diving and underwater photography

\* 102 Clark, Leo J. BS
Chief Engineering Section
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 7
E-1, G-1, G-5

\* 103 Clark, William Dixon PhD
Chief Scientist
Westinghouse Ocean Research Laboratory
Westinghouse Electric Corporation
P.O. Box 1771
Annapolis, Maryland 21404
(301) 765-5300
B-2, E-2, E-3
--Shallow-water community studies
--Aquaculture
--Biological oceanography

Clench, William James PhD
Curator of Mollusks. Retired
Museum of Comparative Zoology
Harvard University
Oxford Street
Cambridge, Massachusetts 02124
(617) 825-2368
B-8, B-12
--Systematics of Western Atlantic Mollusca

\*105 Cockey, Ralph Ringgold MS
Faculty Research Assistant
Natural Resources Institute
University of Maryland
Box 351
Crisfield, Maryland 21817
(301) 968-1655

A-3, B-1, B-13

--Microbiology; including studies of the incidence of

Vibrio parahaemolyticus in Bay water and seafood
and of the growth and toxin production of

Clostridium botulinum, type E, in pasteurized
meat of blue crabs

\* 106 Coffin, Laurence MLA
Landscape Architecture and Urban Design
1312 18th Street N.W.
Washington, D.C. 20036
(202) 223-2088

H-3, Urban systems

--Systems analysis of urbanization in the Rhode River Watershed

107 Cole, Charles Fraklyn PhD Cand.
Professor of Fisheries Biology
Forestry and Wildlife Management
Holdsworth Hall
University of Massachusetts
Amherst, Massachusetts 01002
(413) 545-2821

B-8, B-9, H-2

--Studies of the effects of pesticides and thermal effects on eggs and larvae in estuaries

--Fisheries biology; including population dynamics of Alosa pseudoharengus (alewife) and life history studies of fishes in boreal-temperate estuaries

108 Collette, Bruce B. PhD
Assistant Laboratory Director
Systematics Laboratory
National Marine Fisheries Service
U.S. National Museum
Washington, D.C. 20560

B-4, B-5, Systematic ichthyology

--Fisheries biology; including systematics, distribution, and evolution of Pereidae, Hemicamphidae, Belonidae, and Scombridae

W. F. Berlin

109 Collier, Ries Stuart MS
Fishery Biologist
Marine Contaminants
National Marine Fisheries Service
Rogers Avenue
Milford, Connecticut 06460
(203) 878-2459

B-1, B-8, B-9

--Heavy metal analyses and histo-pathological examinations of crabs, molluscs, and finfish

\*110 Colwell, Rita R. PhD
Associate Professor
Department of Biology
37th and O Streets N.W.
Georgetown University
Washington, D.C. 20016
(202) 625-4126

B-1, B-13, Marine animal and plant diseases
--Microbiology; including development of a data bank,
analysis of microbial metabolism of mercury
compounds, effects of hydrostatic pressure and
temperature on bacteria, relationship of marine
bacteria to plankton, survival and reproduction
of human pathogens in the estuary, and numerical
taxonomy

\* 111 Cones, Harold Nelson Jr. MA
Assistant Professor
Department of Biology, Marine Science Section
Christopher Newport College
Shoe Lane
P.O. Box 6070
Newport News, Virginia 23606
(703) 596-7611 ext. 235
B-8, G-6, Wetlands ecology

B-8, G-6, Wetlands ecology
--Estuarine pollution ecology
--Wetlands research

\* 112 Cook, Thomas M. PhD
Associate Professor
Department of Microbiology
University of Maryland
College Park, Maryland 20742
(301) 454-2848

B-8, B-13, E-3

--Studies of biodegradation of alkylbenzene sulfonate detergents and related arysulfonates in Chesapeake Bay; including determination of rates of mineralization of linear alkylbenzene sulfonate (LAS) detergents and related chemical substances

in Chesapeake Bay environments, characterization of the influence of environmental and biological parameters on the biodegradation process; and development of rapid, simple bacteriological methods for detection, enumeration and isolation of arylsulfonate-oxidizing bacteria

--Studies of the bacterial flora of the Chesapeake Bay nettle, Chrysaora quinquecirrha

--Microbiological modifications of biocides and hazardous chemicals in the Bay

\* 113 Cooper, John Edwin BA
Faculty Research Assistant
Fisheries
Natural Resources Institute
University of Maryland
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext. 37
B-9, B-18, B-19

--Determination of effects of widening of the Chesapeake and Delaware Canal on the spawning of fishes, especially the striped bass

114 Corbett, Kenneth M. PhD
Professor
Botany Department
University of Maryland
College Park, Maryland 20740
(301) 454-3816
B-6, Plant pathology and virology
--Virus diseases of plants

\* 115 Correll, David L. PhD
Chemist
Radiation Biology Laboratory
Smithsonian Institution
12441 Parklawn Drive
Rockville, Maryland 20852
(301) 443-2318
B-13, C-2, C-5
--Phosphorous cycling
--Energy flow in microbial populations

-- Nutrient studies

M. Filler

\*(116)

Cory, Robert Lawrence
Research Oceanographer
Department of the Interior
U.S. Geological Survey
Water Resources Division
CBCES, Smithsonian Institution
Route 4 Box 622
Edgewater, Maryland 21037
(301) 798-4424

B-8, B-19, E-1

--Water quality monitoring

-- Primary productivity

--Collections of epifauna, benthic fanua, and fish fauna to establish baseline population information prior to a sewage plant discharge

117 Costlow, John Deforest PhD
Professor and Director
Marine Laboratory
Duke University
Beaufort, North Carolina 2851

B-1, B-12, B-17

--Ecology, physiology, and larval development of invertebrates

118 Coston, Linda Claire BS
Fishery Biologist
National Marine Fisheries Service
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595 ext. 52

B-8, B-9, B-16

-- Effects of thermal pollution on post-larval fish

The Couch, John Alexander PhD
Aquatic Pathologist
Environmental Protection Agency
Sabine Island
Gulf Breeze, Florida
(904) 932-5326

B-5, B-12, B-13, B-15, C-7, E-3, G-7

--Diseases and parasites of estuarine invertebrates, especially of <u>Callinectes</u> sapidus in Chesapeake Bay and Chincoteague Bay

-- Effects of pesticides on the tissues of organisms

\* 120 Craven, Henry Truxton MS

Senior Supervisor for Viral Isolation
Department of Pathology
Georgetown University
3900 Resovoir Road
Washington, D.C. 20007
(202) 625-7052
B-8, B-13, E-3, G-2, G-7
--Determination of hepatitis associated antigen
replication in oysters by autoradiography

replication of nepatitis associated antigen replication in oysters by autoradiography -- Recovery of viruses from undigested sewage sludge

121 Crawford, Claude C. PhD

Research Associate
Department of Zoology
University of Georgia
235 Sycamore Drive Apt. C-4
Athens, Georgia
(912)546-6886
B-1, B-8, B-13, B-17, B-19, C-2, C-6, E-2, C-5, H-1
--Microbial cycling of dissolved organic compounds

Cressey, Roger Frank PhD
Curator
Division of Crustacea
NMNH
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5781
B-5, B-8, B-15
--Taxonomy of parasitic copepods

\*123 Creter, Robert Vincent MS
Watershed Manager
Water Quality Enforcement and Investigation
Maryland Department of Water Resources
State Office Building
Annapolis, Maryland 21401
(301) 267-5732
B-1, E-1, H-2
--Enforcement of effluent and stream water quality
standards for various industrial discharges
--Surveillance of streams and rivers for various

water quality parameters

124 Crippen, Robert W. MA
Research Associate and Graduate Student
Department of Zoology
University of Maine
Ira Darling Center
Walpole, Maine 04572
(207) 563-3146

B-12, Polychaete systematics, Entrainment studies
--Laboratory duplication of the temperature regimes
found in nuclear - and fossil-fueled power
plants and in their discharge canals in order
to subject various planktonic organisms, including
phytoplankton, meroplankton and holoplankton,
to these conditions and determine their mortality;
field studies to determine the mortality of the
above organisms due to entrainment

125 Croker, Robert Arthur PhD
Associate Professor
Department of Zoology
University of New Hampshire
Durham, New Hampshire 03824
(603) 862-2113

B-1, B-12, Carcinology
--Systematics and ecology of epifaunal and infaunal amphipod crustaceans

\*\*126 Cronin, L. Eugene PhD
Director
Natural Resources Institute
University of Maryland
College Park, Maryland 20742
B-8, E-3, H-3

\* 127 Cronin, William Baker BS
Research Staff Assistant
Chesapeake Bay Institute
The Johns Hopkins University
RD 3, Box 32
Annapolis, Maryland 21403
(301) 268-5231
B-1, B-8, C-4

--Phytoplankton identification --Productivity --Suspended sediments 128 Cross, Ford A. PhD
Leader Elemental Cycling Program
National Marine Fisheries Service
Atlantic Estuarine Fisheries Center
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595 ext. 44

B-8, C-1, Radioecology

--Distribution and turnover of trace metals (particularly manganese, iron, copper, and zinc) in estuarine food webs in North Carolina estuaries

129 Culliney, John L. PhD
Research Fellow
Museum of Comparative Zoology
Harvard University
Cambridge, Massachusetts 02138
(617) 495-2468
B-1, B-17, E-2

--Ecology and behavior of meroplankton and benthos, especially of mollusca

PhD
Professor of Economics
Bureau of Business and Economic Research
University of Maryland
College Park, Maryland 20740
(301) 454-2303

E-1, E-3, Economics

--Regional economics; environmental models for analysis and forecasting in the Bay region

131 Curley, John Richard

Marine Fisheries Biologist

Department of Natural Resources

Division of Marine Fisheries

Commonwealth of Massachusetts

P.O. Box 707

Sandwich, Massachusetts 02503

(617) 888-1155

B-8, E-1, H-2

132 Curtis, Lawrence Andrew MS
Graduate Student (PhD Candidate)
Biological Sciences
University of Delaware
Lewes, Delaware 19958
(302) 645-9873

B-1, B-12, B-18

-- Factors involved in the maintainance of the population of Sabellaria vulgaris Verrill (Polychaeta:

Annelida) in Delaware Bay --- Intrapopulation dispersion of the snail <u>Urosalpinx</u> cinerea

\* 133 Dahlberg, Michael D. PhD
Senior Research Biologist and Chairman
Aquatic Biology
Virginia Institute for Scientific Research
6300 River Road
Richmond, Virginia 23229
(703) 282-9581

B-5, B-8, E-3

--Ecological effects of thermal loading on a freshwater section of the James River

--Pesticide survey

134 Dame, Richard F. PhD
Assistant Professor
Department of Marine Science
U.S.C. Coastal Carolina
Conway, South Carolina 29526
(803) 448-8419

B-2, B-8, B-9, B-18, B-19, E-2, G-5, Ecological energetics, Physiological ecology

--Development of an energy flow model for the intertidal oyster community

--Formation of quantitative models describing influences of the estuarine environment on growth and respiration in invertebrates

135 Damkaer, David M. PhD Cand.
Research Biologist
National Marine Fisheries Service
Department of Commerce
c/o Smithsonian Institution
NMNH
Washington, D.C. 20560
(202) 381-5781

B-17, E-2, H-3

--Systematics and ecology of planktonic Copepoda --Vertical distribution of plankton in estuaries

136 Davis, John Dunning PhD
Vice President
Normandeau Associates, Inc.
26 Norfolk Ave
Northampton, Massachusetts 01060
(413) 584-8983
B-8, E-1, E-3

--Biological impact of thermal discharges
--Biological, physical and chemical aspects of dredge

spoil removal and deposition, especially effects upon benthic biota  $% \left( \frac{1}{2}\right) =\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}\left( \frac{1}{2}\right) +\frac{1}{2}$ 

--Ecosystem structuring of estuarine communities and the energy flow patterns therein --Ecological dynamics of estuarine bivalve mollusks

\* 137 Davies, Robert M. PhD
Research Assistant
Department of Geography and Environmental Engineering
The Johns Hopkins University
34th and Charles Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 678
B-1, B-17, E-1

--Effect of entrainment of zooplankton in power plant cooling water

138 Davis, Roberta Louise AM
Assistant Professor
Department of Biological Sciences
Central Connecticut State College
1615 Stanley Street
New Britain, Connecticut 06050
(203) 225-7481 ext. 341

B-8, B-19, E-2
--Animal effects on environmental factors, particularly the effect upon nitrogen and phosphorus cycles by pelecypod excretion, especially of the Chesapeake Bay scallop, Aequipecten irradians,

and the quahaug, Mercenaria mercenaria -- Productivity of marine benthic diatoms in estuaries

139 Davis, Wayne Ray
Research Aquatic Biologist
National Marine Water Quality Laboratory
Environmental Protection Agency
P.O. Box 277
West Kingston, Rhode Island 02892
(401) 789-9751 ext. 51

B-8, B-12, E-3
--Multifactor analysis of environmental requirements for marine organisms belonging to the soft bottom (infauna) and epibenthic communities; including dissolved oxygen, temperature, and salinity requirements singlely and in combination for such genera as Nephtys, Yoldia, Nucula, Crangon, Palaeomonetes, Loligo, etc. criteria used are survival, gametogenesis, spawning, cleaving rates, gastrulation, metamorphsis and behavior, depending on the material

140 Davis, William Jackson
Assistant Director
Division of Fisheries
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 88
B-9, E-1, H-3

--Fisheries biology; including management and resource assessment

Head, Section of Comparative Oncology
Laboratory of Pathology, General Laboratories
and Clinics
Department of Health, Education, and Welfare
National Cancer Institute, National Institute of
Health
Bethesda, Maryland 20014
(301) 496-4970
B-10, B-18, E-3, Neoplasms in aquatic animals
--Tumors of Chesapeake Bay animals, especially the
relationship of neoplasms in aquatic animals
to environmental factors such as chemical,

biological or physical pollutants

142 DeWitt, Hugh Hamilton PhD
Assistant Professor
Department of Oceanography
University of Maine
Darling Center for Research
Walpole, Maine 04573
(207) 563-3146
B-1, B-4, B-5
--Systematics, distribution and ecology of marine fishes

\*143 Dias, Robert Kent BS
Extension Agent
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 90
A-1, B-5, B-9

--Fisheries biology; including seasonality, distribution and abundance of commercial and sport fishes of Chesapeake Bay and demersal fish resources of the continental shelf area of Middle and South Atlantic regions of U.S.

\*144 Diaz, Robert James Research Assistant

MS

Ecology-Pollution Virginia Institute of Marine Science Gloucester Point, Virginai 23062 (703) 642-2111 ext. 35

B-8, G-1

--Benthic study of the James River and its tributaries in order to characterize existing pollution conditions to serve as a base for future pollution evaluation

145 Dietrich, William E. Jr. PhD
Assistant Professor
Biology Department
Indiana University of Pennsylvania
Indiana, Pennsylvania 15701
(412) 357-2254

B-16, B-17, B-19

--Primary productivity and chlorophyll studies

--Algal physiology

146 Dillon, Charles Ronald PhD
Assistant Professor
Botany Department
Clemson University
Clemson, South Carolina 29631
(803) 656-3452

B-6, B-8, B-19

--Primary productivity of estuarine phytoplankton, periphyton, benthic macrophytes

-- Mass culture of phytoplankton as food for maricultured organisms

-- Taxonomy and distribution of marine algae

147 Dimsdale, Nancy Glude BS
Staff Biologist
Chesapeake Bay Foundation Inc.
P.O. Box 1709
17 State Circle
Annapolis, Maryland 21404
(301) 268-8816
B-1, B-8, E-1

Mary Mary Mary Come

148 Doggett, Arthur Latham III MS
Graduate Student
Department of Zoology
University of New Hampshire
Durham, New Hampshire
A-1, B-9, G-6
--Study of the American lobster and its behavior in relation to water temperature and salinity

\*149 Donnelly, Daniel K. BS
Chemical Engineer
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 27
E-1, G-1

\*150 Donovan, Gerard A. Jr.

Engineering Technician
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038
C-9, E-2, G-5

151 Dovel, William Lawrence BA
Research Associate
Boyce Thompson Institute
1086 North Broadway
Yonkers, New York 10701
(914) 965-0390

B-5, B-8, B-9, B-17, B-18, Ecology of estuarine-dependent ichthyoplankton
--Comprehension of estuarine dependent ichthyoplankton
--Familarization with broad patterns of conceptual views of Chesapeake ichthyoplankton as related to

physical and chemical parameters

--Hudson estuary study

\* 152 Dressel, David Michael
Oceanographer
Oceanographic Division
NOAA
National Ocean Survey
6001 Executive Blvd
Rockville, Maryland 20852
(301) 496-8288
B-8, B-17, E-1, E-2, E-3
--Thermal pollution and its effects on estuarine

copepods, especially Acartia tonsa
--Identification of potential marine pollutants and
examination of the state-of-the-art of in situ
sensors capable of monitoring them

--Formulation of functional specifications for a marine water quality monitoring data acquisition system to obtain baselines needed for environmental monitoring and predictions

\*153 Drobeck, Klaus G. BS
Research Assistant
Fisheries Department
Natural Resources Institute
Chesapeake Biological Laboratory
University of Maryland
Box 38
Solomons, Maryland 20688
(301) 326-4281

B-2, B-8, B-12

--Soft-shelled clam and oyster studies

--Benthic communities of Chincoteague Bay

--Aquaculture; including pilot plant operations, research with larval and young stages of the oyster, and oyster genetics

154 Dryfoos, Robert Louis PhD
Supervisory Fishery Biologist
MARMAP Field Office
National Marine Fisheries Service
RR 7 A Box 522-A
Narragansett, Rhode Island 02882
(401) 789-9326

B-9, B-17, B-18

--Fisheries biology; including menhaden population dynamics, migrations, egg and larval surveys and resource assessments

\*155 Duggan, William Paul MS
Assistant Marine Scientist
Wachapreague Eastern Laboratory
Virginia Institute of Marine Science
Wachapreague, Virginia
(703) 787-3280

B-1, B-2, B-8, B-12

--Developing commercially feasible mariculture techniques for rearing the bay scallop

Duke, Thomas Wade PhD
Laboratory Director
Environmental Protection Agency
EPA Gulf Breeze Laboratory
Sabine Island
Gulf Breeze, Florida 32561
(904) 932-5326

B-1, C-7, E-3
--Movement, accumulation and effects of pollutants,
particularly radionuclides and pesticides, in
the marine environment

157 Durand, James B. PhD
Professor
Department of Biology
Rutgers University
Camden, New Jersey
(609) 964-1766 ext. 225
B-8, C-9, E-1

-- Estuarine primary productivity

--Nutrient cycling

-- Ecology of estuaries and salt marshes

\*158 Durvasula, Subbarao Venkata PhD
Assistant Professor and Research Associate
Department of Biology
The Johns Hopkins University
3600 Charles Street
Baltimore, Maryland 21218
(301) 366-3300 ext. 408

B-17, C-1, E-3

--Comparison of oscillations in the baseline structure in Rhode River, a relatively unpolluted region of the Chesapeake Bay, with other regions

--Development of diagnostic tools of parameters based on the physiological response and recovery of the phytoplankters with a view to predict the probable course of events in the Bay.

\*159 Dyer, Hunter F. BA
Faculty Research Assistant
Department of Special Studies
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext. 69

C-4, F-5, F-6, G-1, G-5, Physical properties, conductivity, salinity, and temperature

--Gathering prototype data of current speed and direction and of tides for use in the Chesapeake Bay hydrological model

160 Eble, Albert F. PhD
Professor
Department of Biology
Trenton State College
Hillwood Lakes
Trenton, New Jersey 08625
(609) 771-2371

B-8, B-12, B-15, B-16

-- Cytology and cytochemistry of amebocytes of Mollusca

-- Physiology of digestive glands of Mollusca

--Histopathology of disease organisms in Mollusca

\* 161 Edmunds, James Richard BA
Research Assistant
Department of Geography and Environmental Engineering
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 677
B-8, B-9, E-1

--Fisheries biology; including distribution and survival rates of anadromous fish species whose spawnings are affected by thermal discharge from steam electric power stations

162 Edwards, Dallas Craig PhD
Associate Professor
Department of Zoology
University of Massachusetts
Morrill Science Center
Amherst, Massachusetts 01002
(413) 545-0148

B-8, B-12, B-18

--Population ecology and behavior of intertidal and shallow-water invertebrates, especially Mollusca; including distribution patterns, their behavioral basis, and ecological significance; mating behavior, fecundity, and early life histories; food preferences; effects of predation on prey populations; growth rates, longevity, and age structure in natural populations; and the energetics of predators. Specific studies on the feeding and growth rates of Polinices duplicatus preying on Mya arenaria under natural conditions

163 Eldridge, Peter John PhD Cand. Graduate Student Fisheries Department South Carolina Wildlife Resources 217 Ft. Johnson Road Charleston, South Carolina B-18, G-1, H-2

-- Population dynamics of marine invertebrate species of commercial importance

\*164 Elliott, Thomas B. MS Fellow Department of Microbiology George Washington University School of Medicine 1339 H. Street. N.W. Washington, D.C. 20005 (202) 331-6533

B-8, B-13, G-3

--Isolation and identification of bacteria from water and sediment of the upper half of the Chesapeake Bay in order to determine the species present and their distribution especially for Vibrio, Aeromonas, and Pseudomonas sp.

165 Ellison, Robert Lee PhD Associate Professor Environmental Sciences Department University of Virginia University Station Charlottesville, Virginia 22903 (703) 924-3761 B-8, D-8

-- Ecology of estuarine Foraminifera -- Geology and ecology of salt marshes

166 Engel, David Walter PhD Fishery Biologist Department of Commerce National Marine Fishery Service Atlantic Estuarine Fisheries Center Beaufort, North Carolina 28516 (919) 728-4595

B-12, B-16, E-3

-- Salinity-temperature effect on the osmoregulation of decapod crustaceans, especially in regard to ion levels in the muscle and hemolymph and to the amino acid metabolism

-- Radiation biology; including the effects of the interactions of environmental factors on the survival of organisms

The state of the state of the

167 Erickson, Burdette Warren Jr. MS
Faculty Research Assistant
Zoology Department
University of Maryland
College Park, Maryland 20742
(301) 454-5461

B-12, B-15, Protozoology

--Cytology, ultrastructure, and tissue culture of individuals of Class Microsporea which parastize commercially important species

\*168 Fang, Ching Seng PhD

Department Head

Department of Physical Oceanography and Hydraulics

Virginia Institute of Marine Science

Gloucester Point, Virginia 23062

(703) 642-2111 ext. 44

D-6, E-1, E-2, E-3, F-3, F-4, G-5, H-3

--Estuarine and coastline hydromechanics

\*169 Favorite, Anna Mae
Statistical Assistant
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 0
B-1, C-1, C-9, Data reduction

170 Fell, Howard Barraclough DSc
Professor of Invertebrate Zoology
Museum of Comparative Zoology
Harvard University
Cambridge, Massachusetts 02138
(617) 646-1651
B-1, B-4, B-12

--Echinodermata biology --Benthic pollution in Boston Harbor and environs

--Pollution monitoring in a saltmarsh environment near Boston

171 Femino, Richard James MA
Instructor
Department of Biology
Pine Manor Junior College
400 Heath Street
Chestnut Hill, Massachusetts
(617) 731-7000 ext. 7905
B-1, B-6, B-8, B-17, B-19, C-8, E-3
--Relation of the environmental factors of the open coast and the tide-pool algae to that of estuarine or marshland pools

A Commence

172 Ferguson, Randolph Lyons PhD
Fishery Biologist (Research)
United States Department of Commerce
National Marine Fisheries Service
Atlantic Estuarine Fisheries Center
Beaufort, North Carolina 28516
(919) 728-4595 ext. 50
B-1, B-8, B-13, B-17, B-18, B-19, G-5
--Estuarine microbiology
--Primary production
--Ecosystem modeling

\* 173 Firth, Richard William Jr. PhD
Senior Environmental Scientist
Eastern Division
Woodward-Envicon, Inc.
1373 Broad Street
Clifton, New Jersey 07012
(201) 473-6044 ext. 54
B-1, B-12, E-1
--Effects of various pollutants, especially heat,
on the ecosystem
--Studies of benthic organisms, especially crustaceans

\* 174 Fischer, Harry Clifton BS
President
Fischer Associates, Inc.
Box 548
Royal Oak, Maryland 21662
(301) 822-4350

A-2, B-2, E-3, F-3, F-4, F-5, F-6, H-1, H-3
--Aquaculture using nutrient rich effluent from
sewage disposal plants to create a food cycle
for filter feeders, such as oysters, to reduce
nutrient level in effluent waters and at the same
time to grow a marketable crop of oysters by
tray culture

\* 175 Fisher, Leo J.
Oceanographer
Ocean Science Department Code T330
USN Oceanographic Office
Washington, D.C. 20390
(202) 767-2841
E-1, E-2, F-5

--Measurement, analysis, display, and prediction of marine environmental parameters which may affect coastal and riverine naval operations

Section Manager

176 Flemer, David A. PhD
Research Associate Professor
University of Maryland
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281

B-8, B-19, C-9

--Aquatic ecology, with emphasis on primary productivity, nutrient chemistry, biology of detritus, and cycling of matter

\* 177 Fletcher, Bettina B.

Biologist

Annapolis Field Office

Environmental Protection Agency

Annapolis Science Center

Annapolis, Maryland 21401

(301) 268-5038 ext. 0

B-13, C-9, E-3

--Bacteriological analysis

--Mercury analysis

\* 178 Florence, Benjamin Mayo MS
Estuarine Section Leader
Fisheries Division
State of Maryland
State Office Building
Annapolis, Maryland 21401
(301) 267-5361

Fishery Resource Management

--Fisheries biology; including use of the fishery resources of Maryland tide waters, evaluation of changing fishery methods, evaluation of fish kills, inventory of waters used by anadromous species, evaluation of various wetland types as to their importance in fishery resources, and evaluation of population structure of striped bass in the Bay

--Pesticide monitoring

179 Foehzenbach, Jack MA
Senior Chemist
New York Environmental Conservation
New York State
91 Elm Street
Islip, New York 11751
(516) 585-5400
B-8, C-9, E-3
--Trace metals and pesticides in organism

--Trace metals and pesticides in organisms -- Energy flow through marine ecosystems

Marine Commence

180 Folger, David Winslow PhD Assistant Professor Department of Geology Middlebury College Middlebury, Vermont 05751 388-7957 (802) D-1, D-8, E-2

--Sedimentation

--Pollutant distribution

-- Hydrology

181 Fore, Paul Lewis PhD Fisheries Biologist Research South Florida Ecological Studies Environmental Protection Agency Box 684A Rt. 1 Naples, Florida (813) 774-2996

B-5, B-8, B-9--Fisheries biology; including ecology, seasonality, distribution, abundance, spawning, energetics and a life history study of the snook in southwest Florida

\*182 Forester, John William PhD Assistant Professor Department of Biological Sciences Goucher College Dulaney Valley Road Towson, Maryland 21204 (301) 825-3300 ext. 453

B-8, B-17, E-3

-- Phytoplankton taxonomy and morphology

--Primary production

--Anadromous fisheries; including the survival of clupeids entering the Susquehanna River to spawn and the effect of hydroelectric water discharged from the Conowingo Dam on spawning clupieds

--Survival of freshwater algae entering estuaries

-- Eutrophication from the chemical-physicalmicrobiological aspects

\* 183 Foster, Neal Robert PhD Assistant Curator Department of Limnology Philadelphia Academy of Natural Sciences 19th Street and the Parkway Philadelphia, Pennsylvania 19103 (215) 564-3921 ext.49 B-1, B-2, B-3, B-4, B-5. B-8, B-9, C-9, D-5, D-6,

-46-

E-2, E-3, G-7, G-8, Fish Behavior and cytogenetics

--Fisheries biology; including behavior, development, early life history, food habits and chromosome studies especially in the order Atheriniformes --Aquaculture, particularly in relation to thermal pollution and eutrophication

184 Foster, Walter S. MS
Research Director
Productivity Research in Marine Ecology (PRIME)
Martin Point Road
Friendship, Maine 04547
(207) 832-9360
B-2, B-7, B-19

--Culturing of oysters, quahogs, mussels, <u>Crassostrea</u>
virginica, <u>Osterea</u> edulis, <u>Mercenaria</u> mercenaria,

<u>Mytilus</u> edulis, <u>Mya</u> arenaria and algae in heated
sea water

\* 185 Fowler, Sam Watson

Public Health Engineer

Division of General Sanitation

Environmental Health Administration
601 North Howard Street

Baltimore, Maryland 21201

(301) 383-2748

B-10, E-1, E-3

--Monitoring and evaluating the shellfish growing waters of the state of Maryland

186 Franz, David R. PhD
Assistant Professor
Ecology Section
University of Connecticut
Storrs, Connecticut 06268
(203) 429-1882 ext. 1415

B-1, B-8, B-12
--Benthic invertebrate studies; including community structure, population dynamics, and reproductive strategies, especially in the mollusks; ecology of oyster predators, especially Urosalpinx

cinerea

#187 Frazier, John Melvin PhD

Research Associate

Department of Environmental Medicine
The Johns Hopkins University
615 North Wolfe Street
Baltimore, Maryland 21205
(301) 955-3295

B-1, B-8, E-3

-- Environmental toxicology

- --Evaluation of potential public health problems generated by the use of marine organisms as food resources
- --Determination of the effects on estuarine productivity by the activities of man in the Bay
- --Role of trace materials in estuarine systems and their natural cycles
- -- Effects of the activities of man on the cycling of trace materials
- --Pesticides and radioactive materials in the ecosystem
- \* 188 Frierman, Edward Michael BA
  Research Assistant
  Department of Malacology
  Virginia Institute of Marine Science
  Gloucester Point, Virginia 23062
  (703) 642-2111 ext.25

B-1, B-2, B-12

- --Examination of oysters from natural populations and laboratory reared stock to determine incidence of established diseases and diagnosis of new diseases
- \*189 Frisbie, Charles M. MS
  Assistant Chief, Fisheries Management
  Fisheries Division
  Maryland Fish and Wildlife Administration
  State Office Building
  Annapolis, Maryland 21401
  (301) 267-5365
  - A-1, B-8, B-9, B-18, Sport fisheries
    --Fisheries biology; including management; especially
    of fish population and distribution, harvest and
    effort of commercial and sport fisheries and
    ecology of Chesapeake Bay finfish populations

\*190 Fritsche, Norman E. BS
Biologist
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext.29
B-8, B-12, C-9
--Benthic studies in pollution research

191 Frost, Terrence Parker

Chief Aquatic Biologist

New Hampshire Water Supply and Pollution Control

Commission

P.O. Box 95, 105 Loudon Road

Concord, New Hampshire 03301

(603) 271-3502

B-8, E-1, E-3

--Water quality improvement as treatment plants increase

in number and become more sophisticated

--Effects of thermal discnarges

--Biological indices of estuarine habitat, especially

using land plants that delineate tidal marshlands

--Success of coho salmon stocking in estuarine

\* 192 Fuller, Samuel L.H. -Invertebrate Zoologist
Department of Limnology
Academy of Natural Sciences of Philadelphia
19th Street and the Parkway
Philadelphia, Pennsylvania 19103
(215) 564-3921 ext 18
B-8, B-12, E-3
--Pollution biology of macroinvertebrates

waters of Great Bay, New Hampshire

\*193 Gabor, John Paul
Biologist I
Fish and Wildlife Administration
Maryland Department of Natural Resources
State Office Building
Annapolis, Maryland 21401
(301) 267-5361

B-8, B-9, Stream ecology
--Fisheries biology, especially of anadromous fish;
including identification of spawning and nursery
areas and documentation of associated conditions

The state of the s

194 Gaither, William S.

PhD

Dean College of Marine Studies University of Delaware Newark, Delaware 19711 (302) 738-2841

A-2, F-3, F-4, G-2

--Estuarine and coastal research management and coordination

-- Economic, engineering and environmental aspects of marine transportation with particular reference to VLCC's

\*195 Galloway, Raymond Alfred PhD Professor
Botany Department
University of Maryland
College Park, Maryland 20742
(301) 454-3821

B-6, B-15, B-16, B-17

--Nutrition of estuarine algae, especially the heterotrophic aspects of photosynthetic planktonic forms; including the nature, extent, and source of biochemical utilization

196 Gankin, Roman MA
Ecological Consultant
Central Atlantic Region
Jack McCormick and Associates
860 Waterloo Road
Devon, Pennsylvania 19333
(215) 687-1295

B-4, B-6, B-8, B-18, E-3, Biological erosion control

--Wetlands mapping

--Effects of spoil on marsh systems and succession onto spoil areas

--Interested in the possible usage of <u>Spartina patens</u> in erosion control

197 Ganna, Louis Allan
Biological Laboratory Technician
National Fisheries Center and Aquarium
Department of the Interior
18th and C Streets N.W.
Washington, D.C. 20015
(202) 967-2825

B-8, B-9, B-15

--Population and evolutionary mechanisms of vertebrates, including their relationship to parasitic life cycles

--Reactions of animals to confinement causing changes in their feeding habits

198 Gaucher, Thomas Aquinas PhD
Consultant
Natural Resources Consultants
53 High Street
Westerly, Rhode Island 02891
(401) 348-8275

B-2, B-8, H-3

--Developing cultivation systems in natural estuaries for scallops and oysters

--Developing specifications and systems for closedrecirculating artifical sea water for algae, fish, Crustacea and molluscs, especially larval stages and early juveniles

--Developing planning and policies framework for coastal zone management

--Coastal site evaluation for power plants and gas storage facilities and residential developments

\*199 Gemignani, Hugo Gino MS
Assistant Professor
Department of Biology
Anne Arundel Community College
101 College Parkway
Arnold, Maryland 21012
(301) 647-7100 ext. 274
A-1, A-3, B-5, B-8, B-14, G-6, H-3
--Wildlife movement in the Chesapeake Bay area

\*200 Geyer, John Charles PhD
Professor of Environmental Engineering
Department of Geography and Environmental Engineering
The Johns Hopkins University
Ames 513
Baltimore, Maryland 21218
(301) 366-3300 ext.1094

E-3, F-4, G-6

--Water supply and wastewater treatment and disposal

-- Resource planning, management and regulation

--Research in environmental science and engineering problems

--Consulting on environmental matters related to power generation

The Residence of the

\*201 Gibson, Victoria Roy MA
Assistant Marine Scientist
Department of Microbiology-Pathology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.14

B-8, B-17, B-18

--Phytoplankton research in Chesapeake Bay, with emphasis on the diatoms and secondarily the dinoflagellates

--Biological properties of the surface microlayer of the water column, particularly the phytoplankton found in this layer

202 Gilbert, William H. PhD Cand
Assistant Professor
Department of Biology
Colby College
Waterville, Maine 04901
(207) 873-1131 ext.246
B-8, B-11, B-18

--Distributional patterns in populations of estuarine bivalves, especially <u>Tellina agilis</u>

203 Gilford, James Harold PhD
Professor
Department of Biology
Hood College
Frederick, Maryland 21701
(301) 663-3131 ext. 261
B-7, E-3, G-6

204 Glancy, Thomas J. Jr. MS
Chairman, Cdr. -USN
Environmental Sciences Department
U.S. Naval Academy
Annapolis, Maryland 21402
(301) 267-3561
B-1, C-1, G-6

205 Gnewich, William Theodore PhD
Assistant Professor of Biology
Department of Science and Mathematics
Briarcliff College
Briarcliff Manor, New York 10510
(914) 941-6400 ext.730
B-1, B-12, B-18
--Systematics, ecology and life history studies of Cumacea (Crustacea: Malacostraca)

THE WARREN

206 Godwin, Walter F.

Marine Fisheries Biologist
Commercial and Sports Fisheries Division
Department of Natural and Economic Resources
1510 Airlie Road
Wilmington, North Carolina 28401
(919) 256-3446

B-5, B-8, B-9

-- Estuarine monitoring and resource assessment

--Biological and ecological studies of fisheries resources

#207 Goodell, Horace Grant
Professor
Department of Environmental Sciences
University of Virginia
Brooks Museum
Charlottesville, Virginia 22903
(703) 924-3995

C-3, D-8, E-1

--Estuarine sediments and sedimentary processes

--Geochemistry of estuarine sediments especially heavy metal sorption

208 Goodman, Joel M. MS
Director
Coastal Zone Resource Planning
College of Marine Studies
University of Delaware
Newark, Delaware 19711
(302) 738-2842

G-5, H-2, H-3

--System engineering and system analysis methodology development as applied to coastal zone resource allocation problems with special emphasis on the interaction between technology and socio-economic evaluation criteria

209 Gore, Kennet Lee MS
Research Staff Assistant
Department of Geography and Environmental Engineering
The Johns Hopkins University
3300 N. Charles Street
Baltimore, Maryland 21218
(605) 366-3300
B-8, B-9, B-17

--Zooplankton, with a specialization in copepods

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210 Graham, Joseph J. PhD
Program Leader, Fishery Biologist (Research)
Department of Commerce
NOAA
NMFS
Biological Laboratory
West Boothbay Harbor, Maine 04575
(207) 633-2221
B-5, B-9, B-18
--Ecology of Atlantic herring, Clupea harengus, age group 0

--Currents and variations in temperature and salinity along coastal Gulf of Maine

--Ecology of fishes, especially larval fishes -- Physical and biological oceanography

211 Grant, David Carroll PhD
Assistant Professor
Department of Biology
Davidson College
Davidson, North Carolina 28036
(704) 892-8021 ext.329
B-1, B-12, Benthic ecology
--Niche diversification and community structure

\* 212 Grant, George Clifford PhD
Associate Marine Scientist
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 17

B-12, B-17, E-2

--Hydrography of the Chesapeake Bay; including observations of temperature, salinity and dissolved oxygen

--Zooplankton studies; including taxonomy, biomass, and chemical analyses especially determinations of protein, lipid, and carbohydrate content of zooplankton samples

213 Grant, William S. BS
Graduate Student
Department of Botany
University of Maine
Orono, Maine 04473

B-1, B-6, B-12

--Trophic interactions between algae, sea urchins and asteroids in the sublittoral zone

--Competition for space among invertebrates in the rocky intertidal region

Marie Management

214 Graves, Willard L. PhD
Associate Research Scientist
Department of Geography and Environmental Engineering
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 709

F-6, G-1, G-5

--Studying and modeling cooloing water discharges from thermo-electric generating stations

215 Green, Albert G. Jr. PhD
Assistant Director
Marine Institute
University of Georgia
Sapelo Island, Georgia 31327
(404) 485-2471

B - 16

1.

-- Carbon dioxide fixation in Spartina -- Physiology of salt marsh halophytes

216 Green, Robert Lamar PhD
Professor and Department Head
Coordinator, Water Resource Research Department
Agricultural Engineering Department
University of Maryland
Shriver Laboratory
College Park, Maryland 20742
(301) 454-3901

A-1, A-2, A-3, A-4, B-2, D-5, D-8, E-1, E-3, F-5, F-6, G-2, G-6, H-2, H-3

--Water resources management with particular interest in water quality and abatement of pollution from agriculture

--Aquacultural engineering with particular interest in closed cycle systems that will lead to improved production, harvesting and processing of aquatic environment which probably lies somewhere between a closed cycle and uncontrolled aquatic system

217 Greene, Kathleen Harleston MS
Teacher
York Academy
Route 1, Box 76 D
Gloucester, Virginia 23061
(703) 693-4983

B-1, G-6
--Feeding of bivalve molluscs

218 Griffith, Ruth Ester PhD
Not presently employed
B-8, B-17, B-19
--Identification of phytoplankton

Gross, M. Grant PhD
Acting Director
Marine Sciences Center
State University of New York
Stonybrook, New York 11790

NG

(516) 246-7710 D-2, E-2, E-3

--Effects of waste disposal operations on environmental conditions in estuarine waters, emphasizing chemical, geological, and physical aspects

\*220 Guide, Victor MSCE
Civil Engineer
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 27

E-1

\*222 Haefner, Paul A.

\*221 Haas, Leonard W. MS

Research Assistant
Environmental Physiology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 47

B-1, B-13, B-17

--Cycling of dissolved organic matter through estuarine plankton
--Ecology and physiology of microflagellates and surface film biota

Associate Marine Scientist
Department of Crustaceology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.70
B-8, B-12, B-16
--Crustacean biology, ecology and physiology,
especially on shrimps and crabs including Crangon
septemspinosa and Callinectes sapidus

PhD

\* 223 Haley, Albert James ScD Professor Zoology Department University of Maryland College Park, Maryland 20742 (301) 454-3201

B-15

-- Biology of endoparasitic helminths of fishes; including studies of their transmission. of their effects on the host, and of the factors which influence host immunity and parasite pathogenicity

224 Hall, John Randolph PhD Research Associate Marine Institute University of Georgia Sapelo Island, Georgia (912) 485-2297

B-1, B-8, B-12

--Bioenergetics of intertidal marine animal sediment systems

\* 225 Hamilton, Daniel Heyward Jr. PhD Research Assistant Professor Chesapeake Biological Laboratory University of Maryland Solomons, Maryland 20688 (301) 326-4281

B-8, B-13, B-17

-- Primary production

-- Polychaete ecology

--Diversity of benthic infauna

\*226 Hammed, Janet Brown HS Laboratory Assistant I NOAA NMFS Biological Laboratory Oxford, Maryland 21654 (301) 226-5193

B-2, B-12, Molluscan shellfish pathology --Parasite studies; including determinations of distribution and oyster and clam mortalities to serve as a guide in the placement of artificial oyster beds and seed transplants in the Chesapeake Bay

-57-

\*227 Hamons, Frank Lowell Jr. AB Project Leader Fisheries Maryland Department of Natural Resources State Office Building Annapolis, Maryland 21401 (301) 267-5151

H-1, H-2, H-3

- --Shellfish population studies for the purpose of charting, recharting, classifying or reclassifying legal clam and oyster harvesting areas, according to population densities, bottom types and maximum use potentials
- --Multidisciplinary studies designed to produce management information concerning (1) the mechanisms involved in the distribution of chlordinated hydrocarbons in suspended and bottom sediments (2) their toxic effects upon shellfish in Chesapeake Bay (3) the effects of erosion upon distribution in the Chester River, and the levels of toxic trace metals in this river system
- \*228 Hanks, Robert William National Coordinator, Marine Ecosystems Analyses Department of Commerce NOAA NMFS Oxford Laboratory Oxford, Maryland 21654 226-5193 (301)B-8, B-12, E-3

- -- Benthic communities and associations
- -- Invertebrate fisheries
- -- Effects of pollutants and contaminants on large ecosystems, including the Chesapeake Bay
- 229 Hargis, William Jennings Jr. Director Virginia Institute of Marine Science Gloucester Point, Virginia 23062 (703) 642-4217G-2, H-2, H-3
- \*230 Hargraves, Paul E. PhD Assistant Professor Oceanography and Botany Departments University of Rhode Island Narragansett Marine Laboratory Kingston, Rhode Island 02881 (401)792-6172

B-6, B-17, E-3

--Systematics, fine structure and distribution of estuarine phytoplankton, particularly diatoms -58-

\*231 Harshbarger, John Carl PhD
Director
Registry of Tumors in Lower Animals
National Museum of Natural History
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5936

- E-3, Diseases of invertebrates and cold-blooded vertebrates
- --Effects of chemical pollutants on, and the etiology and natural history of diseases (especially neoplasms) of, invertebrates and poikilothermic vertebrate animals, primarily at the sub-cellular and cellular levels
- \* 232 Hart, Charles Willard Jr. MA
  Administrator of Consultant Programs
  Department of Limnology
  Academy of Natural Sciences of Philadelphia
  19th Street and the Parkway
  Philadelphia, Pennsylvania 19103
  (215) 564-3921
  - A-1, B-1, B-8, B-12, E-3
  - --Monitoring of the aquatic environment for power companies
  - --Studies of thermal effects and biocides
  - --Literature survey of tributaries of the upper Chesapeake Bay watershed group
  - --Estuarine Ostracoda
  - --Long term changes in estuarine environments due to man and to natural causes, particularly with reference to sedimentation and salinity
- \*233 Harvill, Alton M. PhD
  Professor of Biology
  Department of Natural Sciences
  Longwood College
  Farmville, Virginia 23901
  (703) 5667 ext.9
  B-4, B-6
  - -- Maritime botany of Chesapeake Bay

we.

234 Hatfield, Edward Brooks
Student Research Assistant
Functional Biology
R.S.M.A.S. - University of Miami
10 Rickenbacker Causeway
Miami, Florida 33149
(305) 350-7308
B-8, B-12, B-18, E-1

--Ecology and distribution of benthic organisms; including studies of the effects of environmental conditions (including man-caused additions) on them; of animal-sediment relationships; of interpretation of the giological record; of community or habitat structure, especially field life cycles and feeding types; and of population fluctuations seasonally or over longer periods of time

235 Hauser, William Joseph MS
Research Assistant
Zoology Department
University of Maine
Orono, Maine 04473
(207) 581-7941

B-5, B-8, B-17
--Distribution of ichthyoplankton in relation to temperature and salinity

\*236 Haven, Dexter Stearns

Head, Department of Applied Biology

Virginia Institute of Marine Science

Gloucester Point, Virginia 23062

(703) 642-2111

A-1, B-2, B-8, B-18
--Molluskan biology and ecology; including nutritional studies, low oxygen tension determinations, growth rate studies of hard clams, determinations of methods of control of <u>Urosalpinx cinerea</u>, and monitoring of oyster and clam beds

-- Ecology of jellyfish

237 Hayes, Helen Landau PhD
Special Assistant for Science Affairs
Office of Assistant Secretary for Science
Smithsonian Institution
1000 Jefferson Drive
Washington, D.C. 20560
(202) 381-6383

B-1, B-12, Research program planning

--Biology of bivalve mollusks

-- Estuarine ecology

--Policy, planning, and administration of estuarine research

\*238 Heinle, Donald Roger PhD
Research Assistant Professor
Department of Special Studies
Natural Resources Institute
Chesapeake Biological Laboratory
University of Maryland
Box 38
Solomons, Maryland 20688
(301) 326-4281

B-8, B-17, B-18

--Population dynamics, production, and trophic ecology of estuarine copepods and other invertebrates --Culture of estuarine invertebrates

39 Heisey, Paul Gerald BS
Research Biologist
Fisheries
Ichthyological Associates
P.O. Box 12
Drumore, Pennsylvania 17518

(717) 548-2784

B-9

--Fisheries biology, especially in the Conowingo Reservoir including collecting specimens and determining their age and growth

240 Hettler, William F. MA
Fisheries Biologist
National Marine Fisheries Service
NOAA
Beaufort, North Carolina 28516
(919) 728-4595

B-5, B-8, B-16

--Fisheries biology; including studies on respiration and on the effects of temperature and salinity changes

--Development of techniques to measure sublethal effects of pollution

241 Hewell, Irwin Mayer PhD
Professor of Zoology and Entomology
Biology Department
University of California
Riverside, California 92502
(207) 563-3146

B-1, B-4

--Systematics and ecology of Halacaridae

242 Hidu, Herbert PhD
Assistant Professor
Department of Oceanography
University of Maine
Ira C. Darling Center
Walpole, Maine 04573

(207) 563-3146

B-2, B-8, B-17

-- Ecology and physiology of bivalve mollusks -- Marine aquaculture

\*243 Higgins, Elizabeth Thornthwaite MA
Instructor
Botany Department
University of Maryland
College Park, Maryland 20740
(301) 454-3812

B-6, B-8, G-6

--Systematics and ecology of vascular flora

244 Higgins, Robert Price PhD
Director, Oceanography and Limnology Program
Office of Environmental Sciences
Smithsonian Institution
Washington, D.C. 20560
(202) 381-6573

B-1, B-12, E-2, Benthic biology (meiofauna)
--Systematics and ecology of meiobenthic invertebrates,
especially Kinorhyncha, Priapulida and Tardigrada

Higman, Daniel

Botanist

Chesapeake Bay Center for Environmental Studies

Smithsonian Institution

Box 622, Route 4

Edgewater, Maryland 21037

(301) 798-4424 or (202) 261-4190

B-6, B-8, E-1

-- Ecology of vascular wetland plants, particularly tidal marsh species

--Construction of vegetation maps of salt marshes
by photointerprentation and field surveys

-- Factors which govern the distribution of these plants, and the effects of disturbances on them

\*246 Hill, Richard PhD
Associate Marine Scientist
Department of Ecology-Pollution
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.35

C-6, C-9, E-3

--Organic and nutrient chemistry

--Water quality studies

247 Hillman, Robert Edward PhD
Chief
William F. Clapp Laboratories
Battelle Memorial Institute
Washington Street
Duxbury, Massachusetts 02332
(617) 934-5682

B-8, B-12, E-1

--Estuarine ecology of mollusks, particularly in Long Island Sound, Massachusetts Bay and Cape Cod Bay

248 Hoese, Hinton Dickson

Associate Professor

Biology Department

University of Southwestern Louisiana

Lafayette, Louisiana 70501

(318) 233-3850 ext. 260

B-1, B-8, B-12

--Ecology of fishes and invertebrates

--Biology of Dermocystidium

--Behavior of porpoises

\*249 Hogman, Walter John PhD
Associate Marine Scientist
Department of Ichthyology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 692-2111 ext·37

A-1, B-9, B-18

--Fisheries biology; including population dynamics of estuarine and marine species of Chesapeake Bay, resource utilization of these species by commercial and sport interests, and surveys and monitoring of juvenile members of the principal groups including the clupeides, bass, flatfishes, drums and others

--Calculation of biological parameters useful in detecting environmental trends and correlations

\*250 Holden, Barbara Lee MS
Fisheries Biologist
Fish and Wildlife Administration
State of Maryland
State Office Building
Annapolis, Maryland 21401
(301) 267-5362

B-13, B-15, E-3

--Fisheries biology; including fish kill investigations, determinations of fish parasites and diseases, and studies of the effects of chemicals on fish tissues as well as on their behavior

251 Holt, Buford Reid

Senior Research Associate

Biology

Brookhaven National Laboratory

Upton, New York 11973

(516) 924-6262 ext. 2543

B-6, B-8, B-19, G-6

\*252 Hopkins, Thomas Chattle Jr. BS

Project Manager

Department of Water Resources

Maryland Department of Natural Resources

State Office Building

Annapolis, Maryland 21401

(301) 267-5675

B-8, E-1, H-2

--Estuarine ecology, especially water quality management; including monitoring and instrumentation determinations

PhD

253 Horton, Donald B.

Executive Director
TRIGOM
96 Falmouth Street
Portland, Maine 04103
(207) 773-2981 ext.306
B-8, B-18, G-5

--Estuarine ecology

-- Fish population behavior

--Behavior simulation models

254 Hoss, Donald Earl PhD
Fishery Biologist Research
National Marine Fisheries Service
Atlantic Estuarine Research Center
Beaufort, North Carolina 28516
(919) 728-4595

B-9, B-16, E-3

-- Physiological ecology of fishes; including studies

of the effects of thermal shock on larvae entrained in power plant cooling systems, of the effects of various types of pollution on rates of oxygen consumption and metabolism, and of the accumulation of radionuclides by fish

\* 255 Hoyer, Lawrence Cogswell
Assistant Professor of Biology
Biology Department
Hood College
Frederick, Maryland 21701
(301) 663-3131 ext 263

B-12, B-14, B-18
--Population dynamics and growth of <u>Littorina</u> <u>irrorata</u>
York River and Solomons Island <u>areas</u>

256 Huebner, Judith Dee
Presently unemployed

B-8, B-16, Bioenergetics
--Bioenergetics and physiological ecology of large
intertidal invertebrates, especially carnivorous
species, particularly the predatory gastropods

\* 257 Huggett, Robert James MS

Marine Scientist

Department of Ecology-Pollution

Virginia Institute of Marine Science

Gloucester Point, Virginia 23062

(703) 642-2111 ext. 84

B-8, C-1, D-2, E-3, H-2

(Polinices duplicatus)

--Chemistry of heavy metals in natural waters including absorption to bottom sediments

--Distribution of chlorinated hydrocarbon pesticides and PCB's in Chesapeake Bay

--Analysis and chemistry of unnaturally introduced oils (i.e. Bunker "C")

258 Hull, Cecil Hale J.

Staff Engineer
Planning Division
Delaware River Basin Commission
25 State Police Drive
P.O. Box 360
Trenton, New Jersey 08603
(609) 883-9500

E-3, H-2, H-3
--Effects of phytoplankton on the oxygen balance of polluted estuaries

Mer Walley Control

-65-

259 Humm, Harold J. PhD

Pirector

Marine Science Institute

University of South Florida

St. Petersburg, Florida 33701

(813) 898-7411 ext. 231

B-2, B-6

--Marine algae

260 Hunt, George Russell PhD
Research Manager
New Business Ventures Division
3 M Company
Crow's Nest Drive
P.O. Box 270
Buzzards Bay, Massachusetts 02532
(617) 759-4761

B-2, E-1, Commercial aquaculture
 --Spawning, maturation and growth studies of oysters and lobsters under controlled conditions in order to provide a decreased life cycle and increased

production per unit area

\*261 Hunter, Harriet Ellen BA
Student
Department of Crustaceology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 66
B-1, B-12, B-17

--Studies of adult and larval forms of Emerita talpoida; including ecology, reproductive habits, behavior, salinity tolerances, and migration habits

262 Huntsman, Susan Ann PhD
Research Associate
Oceanography
Duke University Marine Laboratory
Beaufort, North Carolina 28516
(919) 728-2111 ext.38

B-13, B-16, B-17, B-19
--Phytoplankton physiology; including the utilization of trace metals and the interactions with natural and man-made chelating substances

Mr. Maria

\*263 Hyer, Paul Vincent PhD
Associate Marine Scientist
Department of Physical Oceanography and Hydraulics
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2211 ext. 39
E-2, F-3, G-5

--Estuarine mathematical models of salinity and dissolved oxygen distributions in estuaries

264 Ichiye, Takash
Professor
Oceanography
Texas A and M University
College Station, Texas 77843
(713) 845-6661

F-1
--Circulation in estuaries and on the continental
shelf (Northern Gulf of Mexico)
--Storm surges and shelf waves (Gulf of Mexico)

-- Diffusion of pollutants (nearshore)

265 Isaacson, Peter Alan
Aquatic Ecologist
Office of Environmental Planning
NYS Public Service Commission
44 Holand Avenue
Albany, New York
(518) 474-5363

E-1, H-2, H-3
--Resource planning and management as it relates to
public utility use of aquatic resources

266 Jackson, Herbert William PhD
Chief Biologist
National Training Center
Environmental Protection Agency
Cincinnati, Ohio 45268
(513) 871-1820 ext.259

B-8. E-1. E-3

--Recording of the recovery of an area of <u>Spartina</u> in the Oyster River of Durham, New Hampshire, which was wiped out by a sludge spill (dump), probably in 1966

267 Jahoda, John Curtis PhD
Assistant Professor of Biology
Department of Biological Sciences
Bridgewater, Massachusetts 02324
(617) 697-6161 ext. 317

B-18, B-20, E-1, E-3

--Salt marsh ecosystem studies; including the ecology and dynamics of small mammals and the effects of heavy metal contamination and salinity changes on the ecosystem itself

268 Jamieson, William MS
Project Engineer
Grumman Aerospace Corporation
Department 666
Bethpage, New York 11714
516 LR 5
B-8, E-1, E-3

--Estuarine pollution ecology --Biological indicators

269 Jeffries, Harry Perry PhD
Associate Professor
Graduate School of Oceanography
University of Rhode Island
Kingston, Rhode Island 02881
(401) 792-6282

B-17, C-2, E-2

--Determinations of proportions of living and dead materials eaten by commercially important shellfish (hard clam, ocean quahog, smooth mussel) and fishes (winter flounder and menhaden) based on a model of fatty-acid flow in an estuarine ecosystem from producers to consumer

--Determinations of community stability, diversity, and succession from patterns of fatty acids and free amino acids in the organisms growing on submerged plates ("fouling communities")

--Fisheries biology; including distribution and abundance of benthic fishes in Narragansett Bay, with emphasis on long-term variations as functions of climatic change and environmental alteration

\*270 Jenkins, Dale Wilson

PhD

Director Ecology Program

Smithsonian Institution Washington, D.C. 20560

(202) 381-5946

B-1, B-4, E-1, Natural areas, Remote sensing

--Remote sensing of the ecology of the Rhode River Estuary

--Survey of all ecologically important species for preservation in protected and natural areas of the Chesapeake Bay region

-- Evaluation of the impact of activities on federal lands and the effect on ecology

+271 Jensen, Loren Duane

PhD

Associate Professor Department of Geography and Environmental Engineering The Johns Hopkins University

33 North Charles Street
Baltimore, Maryland 21218
(301) 366-3300 ext. 605

B-8, C-9, E-3

--Estuarine ecology, particularly the applied aspects of domestic and industrial discharges into estuarine areas; temporal and spatial responses of aquatic populations to water quality, including determinations of natural flutuations in such parameters as temperature, salinity, and dissolved oxygen

272 Johnson, Curtis Allen

Associate Professor of Agricultural Engineering
Food and Agricultural Engineering
University of Massachusetts
Agricultural Engineering Building
Amherst, Massachusetts 01002
(413) 545-2230

A-2, B-2, E-3, G-6, H-3, Oyster propagation in offbottom controlled environments

-- Growth of oysters in controlled conditions

\*273 Johnson, Patricia G.

Biological Laboratory Technician
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 29

C-9, E-1, E-3

--Development and study of automated analytical methods for nutrient chemistry

Mr. Significant

\* 274 Johnson, Robert Karl PhD
Research Associate
Fisheries
Chesapeake Biological Laboratory
Solomons, Maryland 20688
(301) 326-4281 ext. 37

B-5, B-9, B-20

--Fisheries biology; including the production and distribution of eggs and larvae, especially with regard to environmental impact effects of man-made changes

\*275 Jonas, Lilburn Leroy Jr.

BA

Biologist

Water Quality Investigation and Enforcement Division

Maryland Department of Water Resources

State Office Building

Annapolis, Maryland 21401

(301) 267-5732

B-1, B-6, C-9

--Pollution abatement, control and ecology
--Environmental monitoring

Jones, Galen Everts PhD
Director
Jackson Estuarine Laboratory-Microbiology
University of New Hampshire
Durham, New Hampshire 03824
(603) 862-2175

B-13, C-2, C-3

1.

--Effect of heavy metals on marine bacteria
--Chemolithotrophic bacteria, particularly sulfur bacteria, and psychrophilic bacteria in the marine environment

277 Jontos, Robert Jonathon MS
Teacher, Central High School
City of Bridgeport - Board of Education
45 Lyon Terrace
Bridgeport, Connecticut 06606
(203) 333-8551 and (203) 333-2604

B-1, B-8, Marsh ecology

--Effects of salinity upon the pituitary, thyroid and caudal neurosecretory system of the american eel (A. nostrata)

-- Coastal wetlands, including seasonal changes in the biota

\*278 Jordan, Robert A. Associate Marine Scientist

Department of Ecology-Pollution Virginia Institute of Marine Science Gloucester Point, Virginia 23062

(703) 642-2111 ext.35

B-17, B-19, E-3

--Eutrophication

--Algal ecology

--Productivity

\*279 Joyce, John M.

PhD

PhD

Oceanographer

Chesapeake Bay Center for Environmental Studies Radiation Biology Laboratory Smithsonian Institution Route 4, Box 622

Edgewater, Maryland

(301) 798-4424

B-8, B-17, B-19

-- Phosphorus cycling in the estuarine ecosystem

-- Productivity studies on marshes, attached algae, and phytoplankton, as well as phosphorus uptake in these components

\*280 Karlander, Edward P.

PhD

Associate Professor, Plant Physiology and Biophysics Department of Botany University of Maryland College Park, Maryland 20742

(301) 454-3821

B-19, E-2, F-5, F-6, Energy budgets

-- Physical energy budget, including radiation from the sun, of the Chesapeake Bay and its associated wetlands; including the biological, physical, and thermal changes in response to variations in quality and quantity of energy fluxes

\*281 Kayser, Sigrid R.

BA

Chemist

Annapolis Field Office Environmental Protection Agency Annapolis Science Center Annapolis, Maryland 21401 268-5038 ext. 29 (301)

C-1, C-7, C-9

--Determination and identification of pesticides and petroleum products in water sediment and effluent systems

\*282 Kazama, Frederick Yoshio PhD
Marine Scientist
Department of Microbiology-Pathology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111

B-1, B-6, B-13

--Ultrastructure, nutrition and other physiological activities of estuarine Phycomycetes, especially of species of Phlyctochytrium and Thraustochytrium

--Distribution of fungi associated with decaying

Spartina sp. along a salinity gradient, including cellulolytic and pectolytic activity of these isolates

283 Keck, Richard Thomas

Resident Biologist

College of Marine Studies

University of Delaware

P.O. Box 286

Lewes, Delaware 19958

(302) 645-8489

B-1, B-2, B-8, B-12, C-2

284 Keith, Willis J. BA

Marine Biologist II

South Carolina Wildlife Resources Department

Marine Resources Division
217 Fort Johnson Road
Charleston, South Carolina 29412
(803) 795-7271

A-1, B-1, H-2

--Management and conservation practices of the shellfish areas of South Carolina, especially of intertidal oysters

-- Investigation of aerial photography for shellfish inventory purposes

285 Kendall, Arthur Wayne MS
Fishery Biologist
Ichthyoplankton
Sandy Hook Laboratory
Fort Hancock
Highlands, New Jersey 07732
(201) 872-0200 ext.57

B-5, B-9, B-17

--Fisheries biology; including studies of offshore spawning areas and of migrations of young stages to estuaries, especially of clupeids and bluefish \* 286 Kenda!1, Paul Charles

Research Assistant

Department of Applied Biology

Virginia Institute of Marine Science

Gloucester Point, Virginia 23061

(703) 642-2111 ext, 85

H = 2

--Possible methods of management of the oyster industry

287 Keney, Peggy Mobley

Fishery Biologist

Department of Commerce

National Marine Fisheries Service

Atlantic Estuarine Fisheries Service

Beaufort, North Carolina 28516

(919) 728 - 4595 ext. 23

B-1, B-8, B-12

-- Identification of crab larvae

\*288 Kennedy, Victor Stuart PhD
Research Associate
Chesapeake Biological Laboratory
University of Maryland
Hallowing Point Field Station
Prince Frederick, Maryland 20678
(301) 535-2121

B-8, B-12, E-3

-- Physiological ecology

-- Invertebrate adaptations

-- Effects of environmental alterations

\*289 Kerby, Catherine Jane PhD
Research Analyst, Office of Oceanography
and Limnology
Office of Environmental Sciences
Smithsonian Institution
Washington, D.C. 20560
(202) 381-6572

B-8, B-12, B-16

--Biology of polychaetes, especially of Sabella microphthalma, tound in Chesapeake Bay; including taxonomical, ecological, physiological, behavorial, reproductive and life history studies

290 Kerhin, Randall Thomas
Geologist
Coastal and Estuarine Geology
Marvland Geological Survey
214 Latrobe Hall
The Johns Hopkins University
Baltimore, Maryland 21218
(301) 235-0771

--Determination of the sediment distribution and bottom topography of nearshore environments as related to coastal processes

--Sedimentational patterns of the beach and nearshore environments and factors relating to such sedimentation patterns

\* 291 Kerwin, James Arthur MA
Oceanographer
Bureau of Sport Fisheries and Wildlife
Patuxent Wildlife Research Center
Laurel-Bowie Road 197
Laurel, Maryland 20810
(301) 776-4880 ext. 286

B-1, B-6, B-8, E-2

--Diving duck habitats in Chesapeake Bay

--Study of submerged aquatic plants

--Tidal marsh ecology

\*292 Kiger, Robert W. PhD Cand.
Graduate Research Assistant
Botany Department
University of Maryland
College Park, Maryland 20742
(301) 454-3812

B-4, B-6

-- Vascular flora of Chesapeake Bay

293 King, Howard James III

Biologist III

Department of Natural Resources
Fish and Wildlife Administration
Wye Mills Regional Office (Eastern)
Wye Mills, Maryland 21679
(301) 827-8122

B-8, B-9, H-2

--Fisheries biology, especially of anadromous fish; including documenting physical or chemical barriers in streams to ascending fish --Chemical and physical parameters of streams

294 King, William C.

Seafood Sanitarian
Food Control
Department of Health and Mental Hygiene
61 North Howard Street
Baltimore, Maryland 21201
(301) 383-2625

B-10, E-1, G-2

--Bacteriological monitoring of waters for classification

for shellfish harvesting and of shellfish in the processing plants of Maryland

- --Pesticide heavy metal monitoring of major harvest areas
- --Shoreline survey of watersheds to find, and correct by legal action, the introduction of sewage from commercial or private structures
- --Monthly sampling of sewage treatment effluents
- --Resistance of Vibrio parahemolyticus in oyster shellstock under normal refrigeration
- --Modification of handling techniques directed to reduction or stasis of bacteria in seafood products
- 295 Kinnear, Brian S. MS
  Research Biologist
  National Marine Fisheries Service
  NOAA
  Northeast Fisheries Center
  Narragansett Laboratory
  P.O. 522A Narragansett
  Narragansett, Rhode Island 02882
  (401) 789-9326
  - --Ichthyoplankton collected by NMFS vessels on MARMAP or Northeast Fishery Center cruises in the North Atlantic
- \*296 Kinsman, Blair PhD
  Program Coordinator
  Chesapeake Bay Center for Environmental Studies
  Smithsonian Institution
  Route 4 Box 622
  Edgewater, Maryland 21037
  (301) 798-4424
  E-2, F-3, G-1
  - --Estuarine hydrodynamics and circulations
  - --Air-sea interface studies
  - --Survey design
  - --Data storage and handling
  - 297 Klarman, William L. PhD
    Associate Professor of Plant Pathology
    Botany Department
    University of Maryland
    College Park, Maryland 20742
    (301) 454-3816
    - B-6, B-8, B-13
    - --Diseases of rooted aquatic plants, especially the determinations of their range, their scope, and

the factors, particularly ones resulting from increased civilization, which influence these diseases

\*298 Kocan, Richard Michael PhD
Research Parasitologist
Department of the Interior
Fish and Wildlife Service
Patuxent Wildlife Research Center
Laurel, Maryland 20810
(301) 776-4880

B-13, B-14, B-15

--Infectious and parasitic diseases of wild waterfowl on the Chesapeake Bay

299 Kohlmeyer, Jan Justus PhD
Associate Professor
Institute of Marine Sciences
University of North Carolina
Morehead City, North Carolina 28557
(919) 726-6841

B-6, B-13, Marine mycology

--Marine fungi; taxonomy, morphology, ecology, geographical distribution, biodeterioration, and relationships to wood-boring animals

\*300 Koo, Ted S.Y. PhD
Research Professor
Natural Resources Institute
University of Maryland
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext. 21

A-1, B-2, B-5, B-8, B-9, B-18, H-2

--Fisheries biology; including studying population dynamics, determining age, tagging juveniles, and sonic tagging of the striped bass of Chesapeake Bay

-- Ecological effect of the Chesapeake and Delaware Canal

MeD

\*301 Kotz, Mary Inez
Instructor
Science and Mathematics
Chesapeake College
Wye Mills, Maryland 21679
(301) 758-1537

B-8, B-12, B-16, B-17, B-18, C-1, C-2, C-9, E-1, E-3,

-- Pollution biology; including the effects of dredging

on phytoplankton and zooplarkton and the effects of the effluents of manufacturing concerns on the ecology of a marsh area

\*302 Kouch, John Alexander PhD
Pathologist-Aquatic
Environmental Protection Agency
Sabine Island
Gulf Breeze, Florida

B-5, B-12, B-13, B-15, C-7, E-3, G-7

--Diseases of estuarine invertebrates, especially of Callinectes sapidus

--Effects of pesticides on the tissues of marine and estuarine organisms

303 Kraeuter, John Norman
Research Associate
Marine Institute
University of Georgia
Sapelo Island, Georgia 31327
(912) 485-2333

B-1, B-12, E-2

--Systematics and distribution of estuarine infaunal invertebrates

--Role of invertebrate feces in nutrient recycling in marine systems

--Animal-sediment relationships

\*304 Kriete, William Henry Jr. BS
Research Assistant
Department of Ichthyology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 66

A-1, B-1, B-8, B-9

--Fisheries biology; including studies of population migration patterns, especially as a result of changes in temperature or salinity; of age; of growth rates; of spawning rates; of population size; of year class strength as determined by tagging, etc; and of the effects on populations of commercial fishing

305 Kruczynski, William Leonard PhD
Assistant Professor of Biology
Biology Department
Hartwick College
Oneonta, New York 13820
(607) 432-4200 ext. 238
B-8, B-12, B-15
--Association of pea crabs and their host molluscs

\*306 Krusberg, Lorin Ronald PhD
Professor
Botany Department
University of Maryland
H.J. Patterson Hall
College Park, Maryland 20742
(301) 454 - 3816
B-6, C-2, Nematology
--Biology of nematodes parasitic on estuarine and

\*307 Kuo, Albert Y.

Associate Marine Scientist

Department of Physical Oceanography and Hydraulics

Virginia Institute of Marine Science

Gloucester Point, Maryland 23062

(703) 642-2111 ext.45

E-2, F-3, G-5

-- Estuarine hydrodynamics

aquatic plants

--Turbulence, particularly the diffusion in turbulent flow

308 Kutkuhn, Joseph Henry PhD
Fishery Research Biologist
USDI Fish and Wildlife Service
Great Lakes Fishery Laboratory
Box 640
Ann Arbor, Michigan 48107
(313) 769-7100 ext. 461

A-1, B-18, H-2

--Ecology, including dynamics of estuarine fish and shellfish populations, especially of menhaden and penaid shrimps

\* 309 LaBuy, James Leonard BS
Aquatic Biologist
Law Enforcement
Charlottesville Virginia Laboratory
Environmental Protection Agency
1140 River Road
Charlottesville, Virginia 22901
(703) 296-9897

B-9, B-12, B-17, E-1

--Water quality studies, especially in relation to planktonic and benthic organisms and fishes

310 Lacroix, Guy PhD
Associate Professor and Executive Secretary
GIROQ
Department of Biologie Universitie Laval
Quebec (10e) Quebec, Canada
(418) 656-2864

B-8, B-17, B-19

--Primary production and ecology of zooplankton in the St. Lawrence Estuary and the Gulf of St. Lawrence

\*311 Lakshmanan, Sitarama PhD
Associate Professor
Biochemistry Division
Chemistry Department
University of Maryland
College Park, Maryland 20742
(301) 454-2620

B-12, C-2, E-3

--Studies of the oyster <u>Crassostrea</u> <u>virginica</u>; including its development as a laboratory animal and the impact of man-made alterations in the Chesapeake Bay on its biochemistry and nutrition

\*312 Lanier, James Alfred MA
Education Program Director
Department of Information and Education
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 89

A-1, B-2, B-5, B-9

--Fisheries biology; including catfish management, effects of thermal shock on fish eggs and larvae, culture techniques, and design and management of aquarium systems

313 Lapan, Richard L. Jr

Biological Aid

Ecological Studies on Fish and Invertebrates

Environmental Protection Agency

National Marine Water Quality Laboratory

P.O. Box 277

Kingston, Rhode Island 02892

(401) 789-9751 ext.53

B-8, C-1, E-3

--Study of trace element enhancement through trophic levels by neutron activation analysis and A.A. spectrophotometry of estuarine sediments (including interstitial water and fecal pellets), benthic fauna and pelagic fishes

\* 314 LaPlante, Richard Shaw MS
Faculty Research Assistant
Department of Environmental Research
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281
B-1, B-8, B-12

-- Invertebrate ecology

--Benthic sampling to determine species abundance, distribution, and biomass

\* 315 Lawler, Adrian Russell PhD
Postdoctoral Fellow
Parasitology
Gulf Coast Research Laboratory
P.O. Box AG
Ocean Springs, Mississippi 39564
(601) 875-2244 ext.56

B-1, B-2, B-15

--Parasites of estuarine organisms of the Chesapeake
Bay, including Monogenea, Oodinium cyprinodontum,
fish parasites, chaetognath parasites, polyclads
associated with oysters, and molluskan parasites

--Diamondback terrapin studies

-- Diseases of fishes

\* 316 Lawrence, David R. PhD
Associate Professor of Geology
Geology Department
University of South Carolina
Columbia, South Carolina 29208
(803) 777-4148

B-8, B-9, Invertebrate paleontology

--Studies of oysters; including the environmental history of oyster communities through time, aquaculture, dynamics of oyster populations, and periodic growth fabrics in oysters and

their use in the studies of dynamics -- Animal orientation patterns in estuaries

\*317 Lear, Donald W. PhD

Microbiologist, Chief Biology Section

Annapolis Field Office

Environmental Protection Agency

Annapolis Science Center

Annapolis, Maryland 21401

(301) 268-5038 ext. 22

B-8, B-13, B-17, C-9, E-1, E-2, E-3

--Application of ecological knowledge and progress
to water quality management

PhD 318 Lee, John Joseph Professor Biology Department City College of New York Convent Ave. at 138th Street New York, New York 10031 (212) 621-2549 B-8, B-12, B-13, B-16, B-17, B-18, B-19, E-1, G-6, H-2, H-3--Microbial ecology -- Special growth factors of dinoflagellates, Forminifera, diatoms, and nematodes --Mineral cycling, energy flow, succession, community dynamics and population structure . of salt marsh "aufwuchs" communities --Water quality indices

319 Leonard, John Robert MS

Fishery Biologist Research
Department of the Interior
National Fisheries Center and Aquarium
18th and E Streets N.W.
Washington, D.C. 20240
(202) 967-2551

B-2, C-9, E-1

--Study of Chesapeake Bay fish and crabs retained in closed-recirculated aquariums, including waterquality monitoring and determining the effects of various filter materials on the growth and survival of the organisms

The state of the s

\*320 Lewis, Charles Edward BES
Faculty Research Assistant
Bay Model Study
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext 69

A-2, G-1, G-5

B-8, B-9, B-16

--Instrumentation

--Prototype data gathering for Chesapeake Bay "ydrographic model

321 Lewis, Robert M. MS
Fishery Biologist (Research)
Department of Commerce
NOAA
National Marine Fisheries Service
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595 ext.29

--Fisheries biology; including life history studies of Atlantic menhaden in North Carolina estuaries, determination of the relation of abundance and distribution of young menhaden and associated species to environmental factors (temperature, salinity, tide, etc.) and determination of the tolerance of menhaden to different temperature and salinity levels

322 Light, Melvin
Chief Coastal Oceanography Section
Coast Guard Oceanographic Unit
Department of Transportation
U.S. Coast Guard
159 E
Navy Yard Annex Building
Washington, D.C. 20390
(202) 426-4640

C-9, E-1, F-5

--Oil pollution monitoring program of estuarine and coastal waters

\* 323 Linert, Charles Henry

MS

Biologist I

Maryland Department of Natural Resources Fish and Wildlife Administration State Office Building Annapolis, Maryland 21401

B-9, E-1, H-2

--Fisheries biology; including determination of anadromous fish associated with wetlands; their seasonal variability of occurrence; estimation of their standing crop; their relationships with wetland dependent competitors, predators, and forage species; and their association with the chemical and physical characteristics of the wetland aquatic habitat

--Baseline study of the chemical and physical characteristics of the wetland aquatic habitat

324 Link, Garnett William MA
Graduate Student
Department of Zoology and Institute of Marine
Sciences
University of North Carolina
Morehead City, North Carolina 28557
(919) 726-6841

B-5, B-20, Marine ichthyology

--Fisheries biology; including the comparative life histories of three species of sea basses (Centropristis striatus, C. philadelphicus and C. ocyurus) found in the estuaries and off the coast of North Carolina

\* 325 Lippson, Robert Lloyd MS
Fisheries Biologist
Resource Assessment
National Marine Fisheries Service
Oxford, Maryland 21654
(301) 226-5193

A-1, B-8, B-12

--Crustacean ecology; including assessment of the size of commercial stocks

\* 326 Loesch, Joseph George PhD
Associate Marine Scientist
Applied Science Department
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.85

B-9, B-18, G-6

--Distribution, abundance and growth of the hard clam, Mercenaria mercenaria, in lower Chesapeake Bay

\* 327 Loftus, Michael Eldridge
Graduate Student
Biology Department
The Johns Hopkins University
34th and Charles Streets
Baltimore, Maryland 21218
(301) 366-3300 ext. 408

B-16, B-17, B-19

--Methods involved in determining rates of primary productivity and their relation to the nutritional and physiological condition of several algal species isolated from the Chesapeake Bay --Correlation of laboratory conditions of certain species with conditions preceding and during

--Correlation of laboratory conditions of certain species with conditions preceding and during seasonal periods in which the same species are dominant in the Chesapeake Bay region adjacent to the mouths of the Rhode and West Rivers

-- Algal blooms

\*328 Longcore, Jerry Ray

Research Biologist

Department of the Interior

Bureau of Sport Fisheries and Wildlife

Patuxent Wildlife Research Center

Laurel, Maryland 20810

(301) 776-4880 ext. 283

B-14, C-7, E-3

--Monitoring pollutants in waterfowl (ducks and geese), especially in their wings and eggs --Wintering ecology of waterfowl

\*329 Longwell, John R.
Assistant Chief

MS

BS

Water Quality Investigation and Enforcement Division Maryland Department of Water Resources State Office Building

Annapolis, Maryland 21401 (301) 267-5731

E-1, E-3, H-2

--Administration and investigations of water quality

Mary Mary Mary

Graduate Student and Assistant
Department of Applied Biology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.85

A-1, B-1, B-2, B-8, B-9, B-12, C-1, D-8, G-2, G-6, G-7, H-2

-- Intertidal community structure and ecology

-- Aquaculture, especially of bivalves

-- Commercial shellfisheries

-- Marine extension services

\*331 Ludwick, John Calvin

Director and Professor

Institute of Oceanography
Old Dominion University

Norfolk, Virginia 23508

(703) 489-8000 ext • 455

D-8, E-2, F-1

--Tidal currents in the entrance to Chesapeake Bay

--Shoals and their origin

\*332 Lunz, John David MS
Assistant Marine Scientist
Department of Pollution-Ecology
Virginia Institute of Marine Science
521 Bulkeley Place Apt. 25
Newport News, Virginia 23601
(703) 642-2111 ext.35

B-16, C-1, E-3

--Uptake and release of trace elements by estuarine organisms, specifically as these processes relate to the overall transport within the marine system

--Bioconcentration and depuration of metals in oysters as a function of the physical and chemical properties of a metal in the environment

\* 333 Luttrell, Mark Edwyn MS
Assistant Marine Scientist
Department of Ecology-Pollution
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.50

C-1, Sanitary engineering, Civil engineering

-- Industrial-municipal outfall studies

--Estuarine data anaylsis; including Do, BOD-COD, coliform and benthos dredging studies, and impact determinations

\* 334 Lynch, Maurice Patrick PhD
Associate Marine Scientist
Directors Office
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111

B-8, B-16, G-3

--Environmental physiology, especially of invertebrates
--Development of physiological indicators of condition
for use in detecting changes in invertebrate
populations as a result of sublethal stresses

Assistant Professor and Assistant Director
Center for Environmental Studies
Virginia Polytechnic Institute
1020 Derring Hall
Blacksburg, Virginia 24061
(703) 552-6780

B-12, B-18, E-1

--Effects of toxic materials on estuarine organisms, including fish, invertebrates and algae
--Effects of stress on physiology, community structure and functions of aquatic communities

\* 336 McCormick, Jack PhD
President
Jack McCormick and Associates
860 Waterloo Road
Devon, Pennsylvania 19333
(215) 687-1295

B-8, E-1, G-2, H-2, H-3, Environmental impact assessments -- Tidal marsh and lowland forest vegetation mapping, vegetation analysis, analysis of animal populations, environmental impact assessments for NEPA statements and project planning

-- Environment monitoring and reassessment

--Preparation of draft environmental guidelines, regulations, zoning codes, building codes and legislation

337 McCormick, Michael Edward PhD
Associate Professor and Chairman
Naval Systems Engineering
U.S. Naval Academy
Annapolis, Maryland 21402
(301) 267-3874

E-3, F-3, G-5, G-6, Environmental protection

-- Estuarine hydromechanics

--Waves on floating and fixed bodies

-- Environmental protection

338 McCoy, Edward Gordon MS
Chief, Research and Development Section
Commercial and Sports Fisheries
Department of Natural and Economic Resources
P.O. Box 769
Morehead City, North Carolina
(919) 326-7021

B-1, B-8, B-9

--Management of North Carolina commercial and marine sports fisheries; including inventory, survey, monitoring, anadromous fish studies in the Albemarle Region and offshore, calico scallop study offshore, shrimp research, nursery area identification, oyster renabilitation, and permit investigation for dredge and fill in estuaries

339 McCrary, Anne Bowden
Assistant Professor
Biology Department
University of North Carolina at Wilmington
P.O. Box 3725
Wilmington, North Carolina 28401
(919) 791-4330 ext. 250

B-1, B-12, B-17

--Zooplankton studies, particularly the planktonic larvae of invertebrates

--Seasonal timing of reproductive activity in invertebrates

-- Commensal associations

\*340 McDowell, Samson PhD

Retired
Gulf Plankton Laboratory (Retired)
Academy of Natural Sciences of Philadelphia
19th Street and the Parkway
Philadelphia, Pennsylvania 19104
(813) 463-5535

B-1, B-8, B-17

-- Ecology of Protozoa

-- Identification of microniches

\*341 McEachran, John Douglas Graduate Research Assistant Department of Ichthyology Virginia Institute of Marine Science Gloucester Point, Virginia 23062 (703) 642-2111

B-4, B-5, B-9

--Comparative biology of seven species of skates which occur along the continental shelf from Nova Scotia to Cape Hatteras

\*342 McErlean, Andrew Joseph PhD Senior Staff Biologist Office of Technical Analysis Environmental Protection Agency Waterside Mall S.W. Washington, D.C. 20460

> B-5, B-18, E-3, Estuarine pollution ecology --Biota of Chesapeake Bay; including measurement of change, development of indicator criteria for estuarine communities

343 McGill, David A. PhD Professor Ocean Science U.S. Coast Guard Academy New London, Connecticut 06320 (203) 443-8463

B-8, B-19, C-9

-- Examination of productivity and biomass of a typical estuarine region; including seasonal checks on the availability of nutrients and seasonal collections of plankton and benthos to provide material for energy evaluations leading toward the calculation of trophic dynamics for the system

\*344 McGinnes, Franklin Pierce Executive Vice President Virginia Seafoods Inc. Irvington, Virginia 22480 (703) 438-2111A-4, B-2, G-2

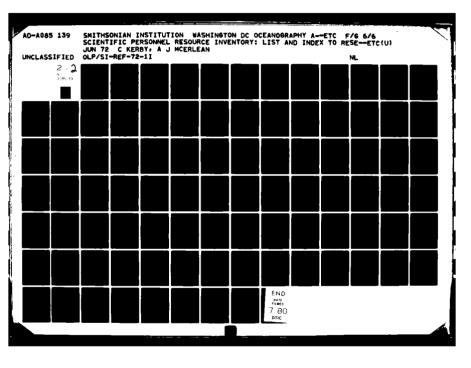
--Operating an oyster hatchery

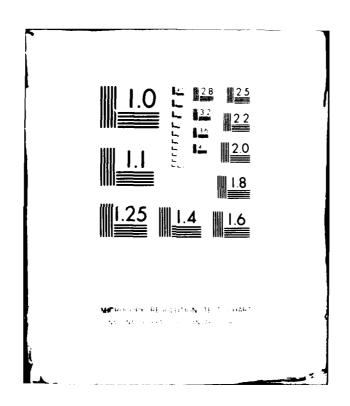
345 McHugh, John Laurence Professor of Marine Resources Marine Sciences Research Center State University of New York Stony Brook, New York 11790 (516) 246-3449

A-1, B-8, B-9, G-6, H-2

--History of the fisheries of New York State and the Middle Atlantic Bight

--National and international fishery management





--Economic and social-political barriers to management of natural resources --Critical problems of the coastal zone

\*346 McLean, Richard Ivan
Radioecologist
Department of Limnology
Academy of Natural Sciences of Philadelphia
Benedict Estuarine Laboratory
Benedict, Maryland 20612
(301) 274-3194

B-8, E-1, Radioecology

--Distribution of radionuclides in the aquatic ecosystems with particular emphasis on the cycling within estuarine food chains

347 McLeod, Guy Collingwood MA
Director of Research
New England Aquarium
Central Wharf
Boston, Massachusetts 02110
(617) 742-8830
B-8, E-1, G-1
--Water quality monitoring

--Trace metal analysis
--Bioassay studies

--Systems of modeling --Algal productivity

\* 348 McMahon, John Walter PhD
Associate Research Officer
Biology and Health Physics Division
Atomic Energy of Canada Ltd.
Chalk River
Ontario, Canada
(613) 584-3311 ext. 258
B-7, B-15, B-17, B-19
--Biology of trematodes living of fish gills

--Blology of trematodes living of fish gills

349 McNicol, Douglas --

President
Bluenose Oyster Farms Ltd.
RR # 2
River Denys, Nova Scotia, Canada
(914) Whycocomagh 172-32

A-1, B-2, G-2
--Developing oyster culture methods and equipment

\* 350 McPherson, Evelyn M.

Physical Science Technician
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 29
C-1, C-9, E-3

\* 351 MacIntyre, William Gordon PhD
Associate Marine Scientist
Department of Oceanography
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111
C-1, C-3, C-5

--Oil (petroleum) fate and transport --Bay mouth nutrient flux measurements

--Kinetics of silicate-sea water solute interactions

352 Malouf, Robert Edward MS
Resident Biologist
College of Marine Studies
University of Delaware
Sea Grant Demonstration Project
Lewes, Delaware 19958
(302) 645-8489

B-2, B-12, B-17

--Invertebrate biology; including energy relationships in bivalve molluscs and density dependent relationships between bivalve larvae and their phytoplankton food source --Mariculture studies

\* 353 Mangum, Charlotte Preston PhD
Associate Professor
Department of Biology
College of William and Mary
Williamsburg, Virginia 23185
(703) 229-3000 ext. 240

B-1, B-12
--Invertebrate biology; including adaptations of organisms to low oxygen conditions and effects of temperature on their metabolism and activity

\*354 Manzi, John Joseph MS
PhD Candidate
Department of Microbiology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 14
B-8, B-17, B-19
--Phytoplankton community structure in the lower
York River

\*355 Marcellus, Kenneth Lee PhD
Associate Marine Scientist
Department of Ecology - Pollution
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 50

B-6, B-8, Remote sensing of wetlands

--Wetland studies; including relationships between
marshes and commercially and recreationally
valuable organisms; determination of the
importance to the marine environment of specific
marshes, application of remote sensing (photographic)
in the evaluation of wetlands, especially of
plant species identification without need for
ground truth data; and an analysis of the
environmental impact on wetland areas (the
coastal zone in general) of specific development
projects such as dredging, and bulkheading

--Aquaculture

-- Environmental law

-- Principles and applications of coastal zone management

\*356 Marchello, Joseph M. PhD
Professor and Head
Chemical Engineering Department
University of Maryland
College Park, Maryland 20742
(301) 454-2431
A-3, E-3, F-4, F-6, G-6, H-1, H-2, H-3

A-3, E-3, F-4, F-6, G-6, H-1, H-2, H-3
--Use of waste heat and sewage in fish farming
--New methods for combating thermal pollution

357 Marcy, Barton Coles Jr. MS
Marine Research Biologist
Resident Fishes and Plankton
Essex Marine Laboratory, Inc.
Novelty Lane
Box 367
Essex, Connecticut 06426
(203) 767-8131
B-5, B-17, E-3
--Ecological study of the effects of a Connecticut

atomic power company; including creel census evaluation; abundance and distribution studies; plankton surveys; entrainment of fish eggs and larvae; growth of eggs and larvae in the laboratory; tagging to determine migration patterns; winter population estimates; physiological studies; location of shad spawning areas; population estimates of juvenile shad and emigration rates; age, growth, stomach analyses and fecundity of major species; sonic tracking; plant intake evaluation; and reactions of young shad to heated effluent

\* 358 Marhsco, Richard J. PhD
Assistant Professor
Agricultural and Resource Economics Department
University of Maryland
College Park, Maryland 20742
(301) 454-3801
A-1, E-3, G-1, G-5, G-6, H-1, H-2, H-3

\* 359 Marks, Colin Herbert PhD
Associate Professor
Mechanical Engineering Department
University of Maryland
College Park, Maryland 20742
(301) 454-2408

A-2, E-3, F-3

-- Sea nettle barrier development

-- 011 containment studies

-- Fisheries economics

--Mixing of stably stratified fluids, including thermal pollution studies

\* 360 Marks, James W. BS
Supervisory Chemist, Analytical Laboratory
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext.0
C-1, C-5, C-9

361 Marsh, George Alex PhD
Assistant Professor of Ecology
Department of Biological Sciences
Florida Atlantic University
Boca Raton, Florida 33432
(305) 395-0339

B-8
--Epifaunal invertebrates and algal epiphytes associated

with eelgrass (Zostera) in the lower York River, Virginia --Invertebrate epifauna of turtle grass (Thalassia)

in Pine Island Sound, Florida

362 Marsh, James Alexander Jr. PhD
Assistant Professor
Marine Laboratory
University of Guam
P.O. Box EK
Agana, Guam 96910
749-2421

B-8, B-19, E-3

-- Primary productivity

-- Reef ecology

-- Effects of thermal pollution on tropical communities

363 Marshall, Benjamin Lawrence BS
Director
Marine Ecology-Chemical Analysis Division
Marine Research Institute
P.O. Box 1253
Duxbury, Massachusetts 02332
(617) 934-2196

B-2, B-8, B-18, C-1, C-9, D-2, E-1, F-1, F-6, G-4, G-5, H-2, H-3, Bioassay studies

--Physiological ecology, population dynamics, and larval culture of marine invertebrates, especially in relation to marine pollutants

--Analytical testing on a wide variety of chemical substances including pesticides and heavy metals

364 Marshall, Nelson PhD
Professor of Oceanography
Graduate School of Oceanography
University of Rhode Island
Kingston, Rhode Island 02881
(401) 792-6185

B-1, B-8, B-19, E-2, H-3

-- Trophic studies in shallow estuarine environments

\*365 Martin, John Varick PhD
Assistant Research Scientist
Department of Earth and Planetary Sciences
The Johns Hopkins University
North Charles and 33rd Streets
Baltimore, Maryland
B-6, B-8, B-17, G-7, G-8
--Phytoplankton analyses for power plant siting studie

366 Massmann, William Henry

Fishery Research Specialist

Division of Federal Aid

Bureau of Sport Fisheries and Wildlife

Department of the Interior

Washington, D.C. 20240

(202) 343-5603

B-8, B-9, H-3

--Research administration

367 G.C. Matthiessen ~Marine Research, Inc.
East Wareham, Massachusetts 02538
A-1, B-1, E-1

368 Maturo, Frank J.S. Jr. PhD
Associate Professor
Zoology Department
University of Florida
Gainesville, Florida 32601
(904) 392-1566

B-1, B-8, B-12
--Systematics, zoogeography, ecology, larval behavior and development of Bryozoa

369 Maurer, Don Leo

Assistant Professor

College of Marine Studies

University of Delaware

Field Station

Lewes, Delaware 19958

(302) 645-8489

B-2, B-8, B-12

--Benthic ecology of invertebrates

370 Mayo, Judy Hartman MS
Fishery Biologist
Department of Commerce
NOAA

NMFS
Atlantic Estuarine Fisheries Center
Beaufort, North Carolina 28516
(919) 728-4595 ext, 25

B-9, B-17, E-1
--Fisheries biology; including aging of American shad

and menhaden and sorting and identifying fish larvae from estuaries and nearshore surveys

--Blue crab (Callinectes sapidus) studies

-- MARMAP sampling

371 Mazurkiewicz, Michael
Assistant Professor
Biology and Oceanography
University of Maine
Darling Marine Laboratory
Walpole, Maine 04573
(207) 563-3146

B-8, B-12, B-15

--Ecology; with emphasis on parasities, diseases and mechanisms of dispersal and population - recruitment of invertebrates

PhD

--Biogeography

372 Meade, Robert H. -Research Hydrologist
U.S. Geological Survey
Woods Hole, Massachusetts 02543

(617) 548-8533

C-4, D-8, E-3
--Sources, transport and deposition of estuarine sediments
--Mixing of fresh and salt waters

\*373 Meanley, Brooke
Biologist
Department of the Interior
Bureau of Sport Fisheries and Wildlife
Patuxent Research Center
Laurel, Maryland 20810
(301) 776-4880 ext.215

-- Ecology of birds, especially of red-winged blackbird and rail populations

PhD

374 Meldrim, John W.
Senior Research Biologist
Experimental Laboratories
Ichthyological Associates
Box 35, RD 2
Middletown, Delaware 19709
(302) 378-9626

B-8, E-3, Fish behavior

--Fisheries biology; including behavioral responses to temperature, oxygen and chemical compounds of estuarine fishes and ecological effects of chemical and power industries on fish populations --Site selection for nuclear power plants

\*375 Merkel, James Anthony PhD
Assistant Professor
Agricultural Engineering Department
University of Maryland
Schriver Laboratory
College Park, Maryland 20742
(301) 454-3901
A-2, B-13, E-3, Coliforms, Contamination, Biology

\*376 Merriner, John Vennor MS
Associate Marine Scientist

Department of Ichthyology Virginia Institute of Marine Science Gloucester Point, Virginia 23062 (703) 642-2111 ext.64

B-2, B-8, B-9

5.4

--Fisheries biology; including studies of life
histories relative to environmental stress,
reproduction, age, growth, competition,
predation, ecology of the alosid nursery area
from nutrient concentrations to secondary production,
striped bass ecology and distribution during
intrariver portion of life, energetics using
microbomb technique, respiration rates in various
salinities and activities and construction of
an energy budget and flow

\*377 Meyer, Stanley N. MS
Research Biologist
Department of the Interior
Patuxent Wildlife Research Center
Laurel, Maryland 20810

B-14, B-18, E-3

--Population trends and reproductive success of ospreys; including effects of environmental pollutants on reproductive rates

--Bald eagle populations and reproductive success in the Chesapeake Bay area; including determinations of levels of environmental pollutants in eggs with relation to their reproductive success

378 Meyers, Caldwell Donald PhD
Consultant
Energy Policy Committee
Environmental Protection Agency
Room 18B-42 5600 Fishers Lane
Rockville, Maryland 20852
(301) 443-3168

B-8, B-9, B-12, E-1

--Fisheries biology; including factors leading to fish mortalities

--Development of criteria to assess the extent of human perturbation on the aquatic ecosystem at surface waters of the continental U.S.

379 Michael, Allan Donald PhD
Research Associate
Marine Biological Laboratory
Woods Hole, Massachusetts 02543
(617) 548-3705 ext. 502

B-8, B-12, E-3

--Systematics and ecology of Amphipoda

--Data analysis

--Benthic community structure

380 Mikolaities, Julius M. AB
Marine Biologist
U.S. Department of the Army
Corps of Engineers
424 Trapelo Road
Waltham, Massachusetts 02154
(617) 894-2400 ext. 521

B-1, B-8, H-3

--Investigating water resource projects, coastal and inland, in the New England - New York area

381 Miller, Don Curtis PhD
Research Aquatic Biologist
National Marine Water Quality Laboratory
Environmental Protection Agency
P.O. Box 398
Johns Island, South Carolina 29455
(803) 559-0371

B-8, B-12, E-3

--Physiological ecology of estuarine and coastal organisms

--Elucidation of the environmental requirements of certain marine fishes and invertebrates of the Southeast

\*382 Miller, James R. PhD
Professor and Head
Agronomy Department
University of Maryland
College Park, Maryland 20742
(301) 454-3718

B-16, E-3, Soil science

--Wetlands studies

-- Classification and use of soils in the Chesapeake Bay area

Faculty Research Assistant
Natural Resources Institute
University of Maryland
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext.64
B-8, B-12, B-18, G-7, H-1, H-2, H-3
--Blue crab survey project
--Larval crustacean studies

384 Mills, Margaret Ann MS
Assistant Director
Cape Cod Bay Biotic Census
Marine Biological Laboratory
LOEB Building
MBL Street
Woods Hole, Massachusetts 02543
(617) 548-3705 ext. 503
B-12, Benthic ecology

--Systematics and ecology of benthic invertebrates, especially of Isopoda

\* 385 Millsaps, Harold S. Jr. BS
Faculty Research Assistant
Department of Special Studies
Chesapeake Biological Laboratory
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext.52
B-8, B-9, E-3

--Field sampling, sorting, and identification of zooplankton, fish eggs and fish larvae to provide a framework for the study of the effects of thermal pollution in the region of a proposed nuclear power plant location

\*386 Moncure, Richard William BS

Computer Systems Analyst

Department of Oceanography

Virginia Institute of Marine Science

P.O. Box 387

Gloucester Point, Virginia 23062

(703) 642-2111 ext.93

C-9, E-2, G-1

--Methods of data analysis, information storage and retrieval; especially for physical and chemical water quality data

#387 Monney, Neil Thomas PhD

Head of Ocean Engineering

Naval Systems Engineering Department

U.S. Naval Academy

Annapolis, Maryland 21402

(301) 267-3873

E-2, F-4, G-6
--Engineering properties

-- Engineering properties of marine sediments
-- Aquaculture, marine fouling, and ecological impact
of ocean structures

\*388 Moore, Charles James MS
Biologist
Department of Limnology
Philadelphia Academy of Natural Sciences
19th Street and the Parkway
Philadelphia, Pennsylvania 19103
(301) 274-3194 ext.4

B-5, B-18, E-3

--Fisheries biology, with emphasis on the effects of power plants (heated effluents) on the occurrence, seasonality, feeding and food habits, and movements of fish within the estuary

Associate Professor
Department of Biology
Salem State College
Salem, Massachusetts 01970
(617) 745-0556
B-8, B-12, B-17, G-6
--Larval ecology
--Benthic-water relationships

\*390 Morales-Alamo, Reinaldo BS
Research Assistant
Department of Applied Marine Biology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2112

B-1, B-8, B-12
--Ecology of marine invertebrates, especially of the Scyphozoa

\*391 Morgan, Raymond Paul II PhD
Research Associate
Fisheries
Natural Resources Institute
Chesapeake Biological Laboratory
Solomons, Maryland 20688
(301) 326-4281

B-8, B-16, C-2
--Fisheries biology; including biochemical systematics, effects of pollutants on enzyme systems, and the environmental requirements of eggs and larvae, especially of anadromous fishes

\*392 Morrow, James W.

Project Manager
Central Atlantic Region
Jack McCormick and Associates
860 Waterloo Road
Devon, Pennsylvania 19333
(215) 687-1295

B-6, B-8, B-19, Energy flow in marsh systems

--Maryland wetland mapping program

--Marsh succession, particularly succession of Phragmites australis

-- Energy flow in marsh ecosystems and across marshupland interface

393 Morse, Douglass Hathaway PhD
Associate Professor
Zoology Department
University of Maryland
College Park, Maryland 20742
(301) 454-5410

B-5, B-8, B-18

--Fis. ties biology; including interactions of Fundulus heteroclitus F. majalis and F. diaphanus, especially in the effects of these species in modifying the niche dimensions of one another

PhD

394 Morse, M. Patricia
Associate Professor
Biology Department
Northeastern University
Huntington Ave.
Boston, Massachusetts
(301) 454-5410

B-1, B-2, B-12

--Systematics and life-histories for nudil ranch mollusks

395 Morton, Eugene Siller PhD
Chesapeake Bay Center for Environmental Studies
Smithsonian Institution
Route 4 Box 622
Edgewater, Maryland 21037
(301) 798-4424
B-3, B-12, B-14
--Brackish water Odonata studies

Contract of the same

\*396 Motta, Jerome J.

PhD

Assistant Professor
Botany Department
University of Maryland
College Park, Maryland 20742
(301) 454-3816

B-6, B-8, B-13

-- Inventory of extant species of fungi in the Chesapeake
Bay and its tributaries

--Correlative study of salinity and temperature and the occurrence of ascomycetous wood decay fungi

\* 397 Mountford, Kent

PhD

Research Assistant Curator
Department of Limnology
Academy of Natural Sciences of Philadelphia
Benedict Estuarine Laboratory
Benedict, Maryland 20612
(301) 274-3194 ext. 6

B-8, B-17, B-19

--Plankton dynamics of temperate estuaries; including the taxonomy, distribution, succession and productivity of phytoplankton and zooplankton communities

--Experimentation with computer techniques in the multiparameter analysis of primary production data as an indicator of change in the estuary

\* 398 Mountford, Nancy Kirk BA
Faculty Research Assistant
Naval Resources Institute
Chesapeake Biological Laboratory
University of Maryland

Hallowing Point Field Station Route 1

Prince Frederick, Maryland

B-12, E-1, E-3
 --Anchor dredge study of the benthic invertebrates
 in the vicinity of a nuclear generating station;
 including collection, sorting, identification,
 species diversity and biomass studies

#399 Mulford, Richard A. BS
Biologist
Department of Limnology
Academy of Natural Sciences of Philadelphia
Benedict Estuarine Laboratory
Benedict, Maryland 20612
(301) 274-3194

B-17

-- Taxonomy and ecology of marine and estuarine plankton

-101-

400 Mullen, Robert Sean BS
Research Assistant/Technician
Benedict Estuarine Laboratory
Philadelphia Academy of Natural Sciences
Benedict, Maryland 20612
(301) 274-3194

B-2, B-17, B-19

-- Effects of heat discharges on the primary productivity of phytoplankton

--Basic phytoplankton ecology, nutrient requirements, growth patterns, species abundance and diversity, etc.

--Methods for measuring productivity in the estuary
--Investigations of certain phenomena such as dark
bottle oxygen fixation and photorespiration of
phytoplankton

\*401 Mumola, Peter Benedict PhD
Research Scientist
Environmental and Space Science Division
NASA
Langley Research Center
Hampton, Virginia 23365
(703) 827-2986

B-17, E-1, E-3

--Remote sensing of phytoplankton by dye-laser induced fluorescence: phytoplankton fluorescence and quantum yield

\* 402 Munson, Thomas Oren PhD

Manager
Aquatic Biology
Westinghouse Ocean Research Laboratory
P.O. Box 1771
Annapolis, Maryland 21404
(301) 765-5773

B-1, C-2, C-7, C-9, E-1, E-3, H-2

--Routes of entry and movement of "hard" chlorinated pesticides and polychlorinated biphenyls through the estuarine system

403 Murdoch, Marianne B.

Biological Technician

Ecosystem Energetics

Atlantic Estuarine Fisheries Center

Beaufort, North Carolina 28516

(919) 728-4590 ext,50

B-8, B-13, B-19

\* 404 Murphy, George J.

Coordinator
Natural Resources Department
FWA
P.O. Box 126
Pasadena, Maryland 21122
(301) 267-5197
B-2, B-8, D-1, H-2
--Fisheries biology
--Hydrography
--Aquaculture programs

\* 405 Musick, John A. PhD
Associate Marine Scientist
Department of Ichthyology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 65
B-4, B-5, Community ecology
--Fisheries biology, including community ecology,

behavior and systematics

-- Chesapeake Bay resources management

--Zoogeography
--Evolution

406 Myers, Thomas D.

Assistant Professor
College of Marine Studies
University of Delaware
Newark, Delaware 19711
(302) 738-2725
B-4, B-12, B-17, E-1, E-2, E-3

--Composition, distribution and vertical migration of zooplankton populations
--Movement of water in estuarine and coastal zones

in relation to movement of introduced pollutants -- Environmental impact studies resulting from ocean dumping or other waste additions

\* 407 Nauman, Jon William
Oceanographer
Department of the Interior
U.S. Geological Survey
218 E Street
Anchorage, Alaska 99501
277-5526

B-1, B-8, B-12, B-19, C-9, E-1, E-3, F-6, G-7
--Effects of thermal and pulpmill additions on estuarine epifauna and water quality

Maria Maria

408 Nelson, John D.

PhD

Post-Doctoral Fellow Biology Department Georgetown University 31st and O Streets, N.W. Washington, D.C. 20007 (301) 625-4126

B-8, C-2, E-3

--Ecology of mercury-resistant bacteria in Chesapeake Bay --Bacterial metabolism of mercury compounds

409 Neumann, David Alan

Faculty Research Assistant

Department of Environmental Research

University of Maryland

College Park, Maryland 20742

(301) 535-2121

B-5, B-16, E-3

--Fisheries biology; including sublethal effects of suspended sediments on various physiological parameters in commercially important fish species

410 Newell, Irwin Mayer PhD
Professor of Zoology and Entomology
Biology Department
University of California
Riverside, California 92502
(417) 787-5910
B-1, B-4, Acarology

--Systematics and ecology of Halacaridae

\*411 Newmann, Martin W. MS
Research Fishery Biologist
Middle Atlantic Coastal Fisheries Center
National Marine Fisheries Service
Oxford Laboratory
Oxford, Maryland 21654
(301) 226-5193

B-5, B-15, E-3

--Disease in estuarine animals --Effects of pollution on fish

\*412 Nichols, Maynard M. PhD
Associate Professor
Virginia Institue of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext 75

D-1, D-8, E-2

--Estuarine sedimentation and hydrology --Foraminiferal ecology

--Wetlands mapping

--Geological oceanography

-- Coastal engineering pertaining to harbor development, erosion and channel dredging

413 Nichols, Paul Ruffner -Fishery Administrator
Department of Commerce
National Marine Fisheries Service
1801 North Moore Street
Arlington, Virginia 22209
(703) 557-9312

414 Nicholson, William Robert MS
Fishery Biologist
Department of Commerce-NOAA
National Marine Fisheries Service
Beaufort, North Carolina 28516
(919) 428-4595

B-8, B-9, B-18

--Population dynamics of Atlantic and Gulf of Mexico menhaden

\* 415 Norcross, John J. MS
Senior Marine Scientist
Department Head
Department of Data Processing
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.82

--Data processing and data analysis

--Circulation of waters at the mouth of the Chesapeake
Bay, flux of suspended sediments in the same
area, and circulation of nearshore waters off
the coastline of Virginia

416 Nordstrom, Robert Dana
Director
Fishery Products Division
National Canners Association
1133 20th Street N.W.
Washington, D.C. 20036
(202) 338-2030 ext 220

A-1, A-3, B-2, B-5, B-8, B-9, B-18, B-19, E-1, E-2, E-3, G-2, G-4, H-1, H-2, H-3, Heavy metals monitoring, Petro-chemical pollution

-- Seafood processing

417 Norris, Robert M. -Executive Secretary
Potomac River Fisheries Commission
P.O. Box 128
Colonial Beach, Virginia 22443
(703) 224-2923

A-1, H-2, Conservation of fisheries

--Licensing and regulating fishing gear and fisheries in the Potomac River below Washington, D.C.

--Maintainance and improvement of the seafood resources of the Potomac River

418 O'Brien, Francis MS
Biology Department
Southeastern Massachusetts University
N. Dartmout, Massachusetts 02747
(617) 997-9321 ext. 412

B-2, B-8, B-12

--Effects of isopod parasites on the prawn, <u>Paleomonetes</u> pagio

--Feeding behavior of echinoderms, especially with relation to bivalve mollusks

--Bivalve propagation and cultivation

419 O'Connor, James Vincent MST
Instructor
Science Teaching Center and Geology
University of Maryland
Room 17 - STC - Education Building
College Park, Maryland 20742
(301) 454-2024

D-1, G-6, H-2

--Field research on the estuarine environment for secondary and elementary earth science teachers --Effects of catastrophic natural events in changing

the estuarine system

--Translation of science data available for the Bay into practical classroom materials that can be utilized by both teachers and students

\*420 O'Connor, Joel S. PhD
Research Ecologist
Marine Science Research Center
State University of New York
Building J
Stony Brook, New York 11790
(516) 286-9725

B-8, B-9, Biometrics

--Synthesis of information on the ecology of estuaries and the coastal zone, especially of fishes and benthic invertebrates

Maria Maria

--Applications of sampling statistics and computer science to estuarine ecology --Potential of fishes and benthic invertebrates as protein sources

\* 421 O'Dell C. Jay MS
Project Leader
Fish and Wildlife Administration
Maryland Department of Natural Resources
State Office Building
Annapolis, Maryland 21401
(301) 267-5361

B-8, B-9, Stream inventory and ecology
--Fisheries biology, especially of anadromous fishes;
including studies of species presence, of spawning
areas, and of water quality to ascertain its
effects on fish passage and spawning

\* 422 O'Malley, Maria Lisabeth MS
Aquatic Biologist
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext. 23
B-8, B-12, E-3
--Study of trophic levels, especially of the

--Study of trophic levels, especially of the benthos and phytoplankton

\* 423 Olmon, Janet Evelyn
Graduate Student
Department of Physiology
Virginia Institue of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111
B-1, B-12, C-2

424 Oostdam, Bernard Lodewyk PhD
Professor
Earth and Space Science
Millersville State College
Millersville, Pennsylvania (717) 872-5411 ext, 304
D-1, D-8, E-2

--Sediment transport
--Estuarine circulation
--Marine waste disposal

Maria Marian

425 Orear, Charles W. PhD
Assistant Professor
Biology Department
East Carolina University
P.O. Box 2577
Greenville, North Carolina 27834
(919) 758-6718

B-9, B-19, C-9

--Fisheries biology; including nutrition, especially of the striped bass, and pollution physiology --Distribution and types of dissolved organics in eastern North Carolina

\* 426 Orris, Patricia Kay MS
Faculty Research Assistant
Botany Department
University of Maryland
College Park, Maryland 20742
(301) 454-3821

\* 427 Orth, Robert Joseph MS
Graduate Student
Zoology Department
University of Maryland
College Park, Maryland 20742
(301) 454-5410
Rel Rel Rel Rel College

B-1, B-4, B-8, B-12, B-18, C-8

-- Effects of eelgrass (Zostera marina) on the community structure of benthic fauna

--Benthic ecology --Wetlands ecology

\*428 Ott, Franklyn Dewayne PhD
Assistant Professor, Marine Scientist
Department of Microbiology and Pathology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 48

A-4, B-2, B-6, B-13, B-19, E-3, G-6, Phycology

--Biology of marine algae; including aspects of floral composition, systematics, life cycles, periodicity, ecology, and the effect of pollution on these factors

--Phytoplankton biology; including culturing to provide rearing of invertebrate larvae and the remote sensing of blooms to establish floral composition, productivity areas, and the relationships of invertebrates and vertebrates which feed on these phytoplankton 429 Otto, Sara Virginia

Laboratory Scientist II

NOAA

National Marine Fisheries Service
Biological Laboratory
Oxford, Maryland 21654
(301) 226-5193

B-2, B-12, Molluscan shellfish pathology
--Molluscan biology; including distribution of
parasites affecting oysters and other shellfish,
experimental raft culture of oysters to compare
off-bottom culture with on-bottom culture, and
comparison of mortality and infection rates of a
stock of oysters from a diseases-enzootic area
and in a stock from a non-enzootic area

\*430 Outten, William Alonza MS
Biologist III
Fisheries Management
Maryland Fish and Wildlife Administration
State Office Building
Annapolis, Maryland 21012
(301) 267-5151
B-9, B-12, Blue crab management
--Shellfish management, especially of blue crabs

Overstreet, Robin Miles

Department Head, Parasitologist

Department of Parasitology

Gulf Coast Research Laboratory

P.O. Box AG

Ocean Springs, Mississippi 39564

(601) 875-2244

B-8, B-9, B-15

--Parasitology; including taxonomy of helminths and protozoans; diseases and their control in mariculture; ecology, host-parasite relationships and life histories of the parasites of fishes and invertebrates

Owens, Olga Von Hartz

Graduate Student

Botany Department

University of Maryland

College Park, Maryland 20742

B-6, B-13, C-2, Cell physiology

--Kinetics of ATP formation in algae

THE STREET, ST

433 Pacheco, Anthony L. MA
Fishery Biologist
Middle Atlantic Coastal Fisheries Center
National Marine Fisheries Service
Highlands, New Jersey 07732
(201) 872-0200 ext. 31

B-8, B-9, B-18

--Fisheries biology; including the distribution of juvenile fishes in waters of the New York Bright and contiguous waters, age and growth studies of spot, gray trout, and croakers and abundance estimates of juvenile menhaden

# 434 Palmer, Harold Dean PhD
(Manager) Aquatic Physical Science
Ocean Research Laboratory
Westinghouse Electric Corporation
P.O. Box 1771
Annapolis, Maryland 21404
(301) 765-5772

D-1, D-8, E-2

--Geological processes; including erosion, transportation and deposition of sediments in estuarine environments

435 Paparella, Michael W. MS
Extension Specialist
Natural Resources Institute
University of Maryland
Box 351
Crisfield, Maryland 21817
(301) 968-1655

A-3, G-6, H-2, Extension service to seafood industry
--Seafood processing including assistance provided to
processors in the area of food science and
technology, mechanization of oyster-shucking
and crab-picking, studies on individual quick
freezing of seafoods, and product and process
development, especially in the area of by-product
and unused species utilization

436 Parker, R.O. Jr. MS
Fishery Biologist
National Marine Fisheries Service
Atlantic Estuarine Fisheries Center
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595
B-9, B-18, Dynamics of artificial reefs
--Fisheries biology; including menhaden tagging studies
--Artificial reef studies

Patten, Bernard C. PhD
Professor
Zoology Department
University of Georgia
Athens, Georgia 30610
(404) 542-8134
B-17, B-19, G-5
--Total ecosystem modeling and systems analysis

\*438 Pauley, Gilbert B. PhD
Fishery Research Biologist
NOAA
National Marine Fisheries Service
Biological Laboratory
Oxford, Maryland 21654

(301) 226-5193
B-9, B-12, B-13, B-15, Pathology and immunology of marine animals

--Utilization of various techniques of immunology, immunochemistry, and microbiology to study various immunological responses of marine fish and shellfish from Chesapeake Bay

PhD
Officer-in-Charge
Sandy Hook Laboratory
NOAA
National Marine Fisheries Service
Highlands, New Jersey 07732
(201) 872-0200
B-1, B-12, E-3

--Effects of ocean disposal of dredging spoils and sewage sludge

--Ecology of symbiotic brachyuran crustaceans --Ecology of epibenthic communities

\*440 Pearson, James Gareth MA
lst Lt.
Biomedical Laboratory
U.S. Army
Edgewood Arsenal
Edgewood Arsenal, Maryland 21010

(301) 671-2586 B-8, B-9, E-3

--Fisheries biology; including community structure of nearshore fish populations in an estuarine environment and fish toxicological studies dealing with establishing "safe" environmental levels of testing of chemical agents at Edgewood Arsenal --Aquatic monitoring of industrial operations at Edgewood Arsenal

-111-

\*441 Peddicord, Richard Knox PhD Cand.
Graduate Research Assistant
Department of Ecology-Pollution
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111

B-8, B-12, E-3

--Ecology of invertebrates; including its relationship to pollution, especially for Rangia cuneata

442 Pequegnat, Linda H. PhD
Research Scientist
Oceanography
Texas A and M University
College Station, Texas 77843
(713) 846-2192

B-4, B-12, E-2, Marine Crustacea

--Systematics and zoogeography of deep-sea decaped crustaceans (caridean shrimps and galatheid crabs in particular) and of bathypelagic mysidacean shrimps

-- Coral reef decapods in the Gulf of Mexico

--Biofouling studies

--World-wide distributions of bathypelagic mysidaceans

\*443 Perry, Matthew Calbraith MS
Wildlife Biologist
Patuxent Wildlife Research Center
Bureau of Sport Fisheries and Wildlife
Laurel, Maryland 20810
(301) 776-4880 ext, 286

B-2, B-8, Wildlife biology

--Effects of environmental pollution on waterfowl, especially the black duck and the canvasback duck, and their habitats; including studies of eggshell thinning due to pesticide treated food, of local and long-range movements in relation to area food supplies and of pollutant-treated invertebrates that serve as food for canvasbacks

444 Peters, David Stewart PhD
Fishery Biologist
National Marine Fisheries Service
Beaufort, North Carolina 28516
(919) 728-4595

B-5, B-16, E-3

--Measurements of the effects of environmental changes on various processes of fish metabolism including feeding and growth rates, food conversion efficiency, and nitrogen metabolism

Mar Hilliam Land

Research Associate
Natural Resources Institute
University of Maryland
P.O. Box 38
Solomons, Maryland 20688
(301) 326-4281 ext.47

B-4, B-8, B-12

--Benthic invertebrate ecology

--Biology and population studies of Mya arenaria

\*446 Pheiffer, Thomas H. MED
Interagency Planning Coordinator
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext, 8

E-1, E-3, G-1, H-2, H-3

--Development of a management entity for the Chesapeake
Bay System in order to utilize the full potential
of the hydro-dynamic mathematic model of the
Bay now being tested at the Annapolis Field Office

MS

447 Phillips, James W. MS
Assistant Professor of Biology
Biology Department
Westfield State College
Western Avenue
Westfield, Massachusetts 01085
(413) 568-3311 ext, 76

B-5, B-9, Fish embryology

-- Effects of an atomic reactor on fish egg development

448 Phillips, Philip Julian PhD
Biologist-Ecologist
Environmental Resources Branch
Corps of Engineers
North Atlantic Division
90 Church Street
New York, New York 10007
(212) 264-6912

B-8, B-12, B-17

--Cnidarian systematics, zoogeography and ecology,
especially of Scyphozoa, hydromedusae, and Siphonophora
--Benthic community studies, particularly with respect
to burrowing Crustacea

449 Picciolo, Anthony Ronald PhD
Chief Data Acquisition Branch
Operations Division
National Oceanographic Data Center
Rockville, Maryland
(202) 426-9070

B-1, E-2, G-1

--National data management of oceans and estuaries

450 Pierce, Jack Warren
Geologist
Division of Sedimentology
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5862

D-1, D-8, E-2

--Suspended particulate matter, primarily sedimentary particles, and their interaction with organic and inorganic material

-- Flux of sediment

451 Pierce, Sidney K. PhD
Assistant Professor
Zoology Department
University of Maryland
College Park, Maryland 20742
(301) 454-5197

B-1, B-8, B-12, B-16

--Cellular mechanisms underlying the physiological interactions of some Chesapeake Bay invertebrates with their environment; including osmotic and ionic regulation and nitrogen excretion in Modiolus demissus, salinity studies of Diadumone, and electrophysiology of the nervous system development in the polyp of Chrysaora quinquecirrha

--Suitability of Modiolus demissus for studying the physiological basis of thermal tolerances

452 Pinkham, Carlos Frank Amory PhD
Cpt. U.S. Army
Ecology Program
Molecular Biology Branch
Biomedical Research Laboratory
Edgewood, Arsenal, Maryland 21010
(301) 671-2586

B-18, B-20, E-1

--Terrestrial vertebrate research dealing with population dynamics of marsh and lowland vertebrates

--Environmental monitoring of Edgewood Arsenal testing activities

\* 453 Pluhowski, Edward John
Research Hydrologist
Water Resources Division
U.S. Geological Survey
4903 Dowlais Court
Rockville, Maryland 20853
(212) 343-2640

D-8, F-6, Hydrology

--Determining runoff in the Rhode River watershed

PhD

--Sediment production

-- Temperature patterns in streams

454 Poluhowich, John J.

Associate Professor
Biology Department
University of Bridgeport
Dana Hall
Bridgeport, Connecticut
(203) 384-0711 ext, 464

B-5, B-16, C-2

--Physiology of the American eel, Anguilla rostrata, with emphasis on characterizing certain blood parameters as these animals migrate in the estuary

455 Porter, Hugh J. MS
Assistant Professor
Institute of Marine Sciences
University of North Carolina
P.O. Drawer 809
Morehead City, North Carolina 28557
(919) 726-6841 ext. 7

B-8, B-9, Molluscan taxonomy

--Taxonomic, ecological survey, aquaculture, and reproductive studies of Mollusca, especially of two quahog species, inhabiting the estuarine and marine waters of North Carolina

\* 456 Powell, Edwin Huff

Manager

Windmill Point Oyster Co.

Urbana, Virginia 23175

(703) 758-2357

A-1, B-2, H-1

--Conception, design, construction and operation of an economically feasible oyster hatchery

\* 457 Power, Garrett

LL M

Professor of Law School of Law University of Maryland 500 West Baltimore Street Baltimore, Maryland 21201 (301) 528-7661

G-2, G-4, H-1, H-2, H-3, Environmental law
--Legal problems of Chesapeake Bay management
--Legal and economic problems of wetland management

458 Price, Kent Sparks PhD
Associate Professor-Assistant Dean
College of Marine Studies
University of Delaware
P.O. Box 286
Lewes, Delaware 19958
(302) 645-6676

B-1, B-2, B-5

-- Ecology of estuaries

--Water regulation and reproduction in elasmobranchs
--Temperature requirements in gonadal development in
the American oyster

--Mariculture

--Estuarine fisheries biology

459 Price, Thomas John MS
Fishery Biologist Research
Department of Commerce
National Marine Fisheries Service
Atlantic Estuarine Fisheries Center
Beaufort, North Carolina 28516
(919) 728-4595 ext.46

B-1, B-8, B-12

--Studies on species composition, standing crop, and energy flow of benthic macroinfauna in estuaizes near Beaufort, North Carolina

--Radiation biology; including studies of the uptake, assimilation and loss of various radionuclides by marine organisms and tracer studies using radionuclides to determine the feeding selectivity of marine invertebrates

460 Pristas, Paul Joseph

Fishery Biologist

Department of Commerce

NOAA

National Marine Fisheries Service

P.O. Box 4218

Panama City, Florida 32401

(904) 234-6541

B-1, B-8, B-9

--Occurrence of coastal benthic fish and crustaceans in St. Andrews Bay, Florida

461 Psuty, Norbert Phillip PhD
Assistant Director
Marine Sciences Center
Rutgers University
New Brunswick, New Jersey 08903
(201) 932-3081

D-5, E-1, Remote sensing

--Measuring and mapping the standing crop productivity in salt marshes by remote sensing techniques; use of color infrared photography for species identification

--Sediment migration and beach response at Sandy Hook, New Jersey

\* 462 Raney, Edward C.

Owner and Director
Ichthyological Associates
301 Forest Drive
Ithaca, New York 14850
(607) 272-2455

B-1, B-5, B-8, B-9, B-20
--Fisheries biology; including systematics, ecology and behavior, especially of the C and D Canal, the Susquehanna Flats area, and the lower Susquehanna River

BS

\* 463 Rasin, Vaclav James Jr.
Faculty Research Assistant
Fisheries
University of Maryland
P.O. Box 38
Solomons, Maryland 20688
(301) 326-4281 ext, 72

B-5, B-8, B-9
--Determination of the effects on fish eggs and larvae
of the videning and deepening of the Chesapeake
and Delaware Canal

\*464 Rawls, Charles Kelso Jr. MS
Research Associate
Natural Resources Institute
Chesapeake Biological Laboratory
University of Maryland
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext, 29
B-8, B-20, E-3, Wetlands ecology and characterization,
Wildlife management

-- Investigation of Eurasian watermilfoil and other

noxious aquatic vegetative species; including studies of their control, distribution, toxicology, concentrations of herbicide residues, etc.

BS

MA

--Distribution and changes in abundance of aquatic and marsh vegetation in the Chesapeake Bay

--Pesticide residues in Bay waters and biota

--Classification, indexing, characterization, ecology and vertebrate production of wetlands

-- Sublethal effects of pesticides on Bay fauna and flora

Faculty Research Assistant
Environmental Research
University of Maryland
Natural Resources Institute
P.O. Box 131
Solomons, Maryland 20688
(301) 326-4281

B-1, B-8, B-12

--Control of the sea nettle in Chesapeake Bay

--Biological photography of marine organisms

466 Recksiek, Conrad W.
Graduate Student
Zoology Department
Murray Hall
University of Maine
Orono, Maine 04473
(207) 581-7941

B-5, B-8, B-9

--Fisheries biology; including the distribution of pelagic fishes in the Sheepscot River Estuary, Wiscasset, Maine, and of larval fishes in Narragansett Bay, Rhode Island

\*467 Rees, Colin Pritchard PhD
Assistant Professor
Zoology Department
University of Maryland
College Park, Maryland 20742
(301) 454-5410

B-1, B-8, B-12

--Amphipoda; including the dynamics and interrelationships of mixed populations of selected species in the Bay, salinity preferences of selected species, and the distribution and ecology of Gammaridae and associated organisms in the Patuxent River System

the state of the

\*468 Reintjes, John William MS
Supervisory Fishery Biologist Research
Department of Commerce
NOAA
National Marine Fisheries Service
Beaufort, North Carolina 28516
(919) 728-4595

B-5, B-9, B-18

-- Early life histories and population dynamics of menhaden and other clupeid fishes

469 Rhodes, Edwin W. BS
Fishery Biologist (Research)
NOAA
National Marine Fisheries Service
Rogers Ave.
Milford, Connecticut 06460
(203) 878-2459 ext.26

B-2, B-9, B-12

--Development of methods for rearing invertebrate larvae, particularly bivalve mollusks

\*470 Rhodes, William R. MS
Assistant Marine Scientist
Department of Ichthyology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.64

B-1, B-8, B-16

--Determination of the biological structure of estuarine systems, the relationship of individuals to the biological and physical environment and applications of this knowledge in fisheries management

471 Rice, Theodore R. PhD
Director

B.S. Department of Commerce
Atlantic Estuarine Fisheries Center
National Marine Fisheries Service
Beaufort, North Carolina 28516

B-8, B-9, Radioecology

--Estuarine studies; especially on fish; with special emphasis on radioecology, elemental cycling, primary productivity, and population dynamics of menhaden, game fish and artificial reefs

War was the way

472 Rich, Peter H.

PhD

Research Associate Biology Department Brookhaven National Laboratory Upton, New York 11973

B-6, B-8, B-19

--Benthic carbon metabolism, primary production of aquatic macrophytes and roles of dissolved organic carbon in a tidal salt marsh in New York

\* 473 Richards, Clarence Edward MS
Assistant Marine Biologist
Department of Ichthyology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 29

B-9, B-18, G-5

--Fisheries biology; including age, growth, distribution, and population studies especially of food and game fishes

474 Riser, Nathan Wendell PhD
Director and Biology Professor
Marine Science Institute
Northeastern University
Nahant, Massachusetts 01908
(617) 581-1170

B-4, B-7, B-12

--Bionomics of marine Turbellaria and Nemertinea

\*475 Ritchie, Douglas Edward Jr. AB
Faculty Research Assistant
Fisheries Department
Natural Resources Institute
University of Maryland
P.O. Box 38
Solomons, Maryland 20688
(301) 326-4281 ext.20
A-1, B-5, B-9, Ecology of fishes

--Adult fisheries biology in Chesapeake Bay; including tagging studies

\*476 Rivkin, Samuel

Department of Microbiology

Virginia Institute of Marine Science

Gloucester Point, Virginia

(703) 642-2111

B-2, B-8, B-12

A PROPERTY OF

\*477 Robbins, Chandler S. MS
Chief, Migratory Nongame Bird Studies
Wildlife Research Division
Department of the Interior
Migratory Bird Populations Station
Laurel, Maryland 20810
(301) 776-4880 ext. 281
B-14, B-18, E-1

A78 Roberts, Henry Barndt HS
Senior Museum Specialist
Division of Crustacea
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5781
B-12, Taxonomy, Invertebrate paleontology
--Taxonomy of brachyuran crabs

A79 Roberts John L. PhD
Professor
Zoology Department
University of Massachusetts
Amherst, Massachusetts 01002
(413) 545-0157
B-5, B-12, B-16

--Comparative physiology and physiological ecology
--Temperature adaptations of invertebrates and fishes
with reference to the influence of photoperiod
--Fisheries biology; including neural control of
ventilation in fishes and physiology of fish
ventilation and circulation with reference to
habitat type, activity and thermal stress

Roberts, Morris H. Jr. PhD
Program Director, Invertebrate Studies
Invertebrate Division
Aquatic Sciences Inc.
2624 N.W. 2nd Avenue
Boca Raton, Florida 33432
(305) 391-0091
B-2, B-12, E-3
--Larval development and culture of Callinectes sapidus, and other decapods found in Chesapeake Bay
--Bioassay of pesticides with decapod larvae

M. Place

481 Roper, Clyde F.E.

PhD

Curator

Department of Invertebrate Zoology Division of Mollusks

Smithsonian Institution Washington, D.C. 20560

(202) 381-5605

B-4, B-12, E-2

-- Cephalopoda; including determinations of occurrence, abundance, seasonality, age group composition, spawning localities, etc.

482 Ropes, John Warren BA

Fishery Biologist Research Department of Commerce

NOAA

National Marine Fisheries Service

Oxford, Maryland 21654

(301) 226-5193

B-1, B-9, B-18

-- Biology and population dynamics of the surf clam, Spisula solidissinea

\* 483 Rose, Curt Dean PhD

Research Associate Professor Department of Fisheries

Chesapeake Biological Laboratory

University of Maryland

Box 38

Solomons, Maryland 20688

(301) 326-4281 ext. 50

B-2, B-8, B-9

--Oyster biology

-- Shellfish aquaculture

-- Effects of heated effluents and oil pollution on shellfish

\*484 Rosenfield, Aaron

Director, Pathology Investigations Department of Commerce

National Marine Fisheries Service

Oxford, Maryland 21654 (301) 226-5193

B-9, B-13, Pathobiology

-- Comparative studies on the pathological responses of marine organisms to infectious and noninfectious disease agents in natural or man-altered estuarine and coastal environments and in mariculture operations in order to prevent, alleviate, or control mortalities of living natural resources

Mark Market Control

and to increase the efficiency of management and utilization of fishery resources, including disease diagnoses, histopathology, and micropathogen identification, characterization, and taxonomy -- Biochemical and morphological manifestations of diseases in host organisms and in cell systems -- Host defense mechanisms and microbial pathogenicity

485 Ruber, Ernest PhD
Associate Professor
Biology Department
Northeastern University
Boston, Massachusetts 02115
(617) 437-2260

--Effects of pesticides on algae and microcrustaceans

486 Russell, Clifford Springer PhD
Research Associate
Resources for the Future, Inc.
1755 Massachusetts Ave. N.W.
Washington, D.C. 20036
(202) 462-4400 ext. 63
E-3, H-1, Optimization modeling
--Regional modeling for residuals (Pollution management)

487 Russell, Henry Drummond PhD

Mollusk

Museum of Comparative Zoology
2001 Harvard

Cambridge, Massachusetts 02138
B-1, B-8, B-12

B-1, B-8, B-12
--Ecology and life history studies of the Nudibranchia

\*488 Rutledge, Carleton Jr. MS
Fellow Engineer
Oceanic Division
Westinghouse Electric Corporation
P.O. Box 1488
Annapolis, Maryland 21404
(301) 765-5739

A-2, C-4, C-7, C-9, D-8, D-9, E-1, E-2, F-7, G-1 G-7, G-8, H-2, H-3

--Oceanographic and meterological monitoring systems

--Bottom sediments and topography --Bottom mapping acoustic systems

-- Acoustic aids to navigation

--Navigation and positioning systems

-- Underwater T.V. photography

--Submersible vehicles and diver life support

--Sonar studies

Mark Comment

\* 489 Ruzecki, Evon Paul MS
Associate Marine Scientist
Department of Physical Oceanography and Hydraulics
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 43
E-2, F-3, G-6
--Estuarine circulation
--Material flux measurement at the mouth of the
Chesapeake Bay

490 Ryan, David Arnold
Chairman
Science Department
The Pingree School
Highland Street
S. Hamilton, Massachusetts 01982
(617) 468-4415
G-6

Associate Professor
Department of Biology
East Carolina University
Greenville, North Carolina 27834
(919) 758-6725
B-1, B-9, B-12
--Biology of crustaceans, especially as related to reproduction

PhD Ryther, John Hood Senior Scientist Biology Department Woods Hole Oceanographic Institution Woods Hole, Massachusetts 02543 (617) 548-1400 ext. 322 B-2, B-8, B-17, B-19, C-1, C-9, E-1, E-2, E-3 --Development of a waste recycling system in which unicellular algae are grown on treated sewage effluent and then fed to bivalve molluscs under controlled conditions -- Uptake of heavy metals, chlorinated hydrocarbons, and polychlorinated biphenyls by bivalve molluscs and other estuarine animals -- Effects of thermal discharges on estuarine organisms -- Marine aquaculture in general

493 Saila, Saul B.

Director

Marine Experiment Station
University of Rhode Island

University of Rhode Island Graduate School of Oceanography Kingston, Rhode Island 02881 (401) 792-6239

B-18, E-3, G-5

--Estuarine fish population dynamics

--Dredge spoil disposal evaluation

494 Saloman, Carl Herman

Fishery Biologist (Research)

Department of Commerce

NOAA

NMFS Biological Laboratory
75 33rd Avenue

St. Petersburg Beach, Florida 33706

(813) 360-7096

B-1, B-8, B-12

--Crustacean taxonomy

--Benthic population densities in relation to sediments and water quality

PhD

--Water quality monitoring

495 Salvini-Plawen, Luitfried V. PhD
Dozent Assistant
Zoological Institute
University Vienna
Dr. Karl Lueger-Ring l
Vienna, Austria

1 - 12

--Biology of the aplacophorous molluscs; including ecology, distribution, and anatomy

\*496 Sampugna, Joseph PhD
Assistant Professor
Chemistry Department
University of Maryland
College Park, Maryland 20742
(301) 454-2310

B-8, B-12, C-2

--Biochemistry of estuarine inhabitants; including the lipid biochemistry of the Virginia oyster

497 Sandifer, Paul Alan PhD Cand.
Assistant Marine Scientist
South Carolina Marine Research Laboratory
P.O. Box 12559
Charleston, South Carolina 29412
(803) 795-2081

B-2, B-12, B-17
--Biology and development of estuarine Crustacea,
especially of decapods
--Taxonomy and biology of estuarine zooplankton
--Aquaculture

\* 498 Sapp, Ranford Michael
Senior Engineer
Oceanic Division
Westinghouse Electric Corporation
Box 1488
Annapolis, Maryland 21404
(301) 765-5789

A-2, E-1, E-2, F-7

--Remote (acoustical and optical) sensing of aquatic resources, characteristics and conditions
 --Engineering aspects of environmental surveys and monitoring systems, and programs

499 Sawyer, Philip John
Professor
Zoology Department
University of New Hampshire
Spaulding Life Science Building
Durham, New Hampshire 03824
(603) 862-2106
B-5, B-8, B-17
--Ichthyoplankton studies

\*500 Sawyer, Thomas Knowlton MS
Staff Specialist
Department of Commerce
Department of the Interior Building
1800 C Street N.W.
Washington, D.C.
(202) 343-6643
B-1, B-8, B-9, B-12, B-15, E-3

--Marine Protozoa
--Marine diseases

501 Schick, Daniel Frederick MS

Marine Resources Scientist
Research Division
Maine Sea and Shore Fisheries
McKown Point
West Boothbay Harbor, Maine 04575
(207) 633-5572

B-2, B-12, H-2

--Biology of the bloodworm with reference to its adaptability to the concentrations and controls of aquaculture and to environmental stresses

The state of the s

502 Schmitt, Waldo Lasalle PhD
Research Associate (Retired)
Division of Crustacea
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5313
B-1, B-12, Taxonomy of Crustacea

B-1, B-12, Taxonomy of Crustacea
--American Pinnotherid crabs; some are parasitic

and/or commensals of oysters and other shellfish

503 Schopf, Thomas Joseph Morton
Assistant Professor
Geophysical Sciences
University of Chicago
5734 Ellis
Chicago, Illinois 60637
(312) 753-8163

B-1, B-12, E-2
--Ecology and distribution of Bryozoa

\*504 Schott, C. Donald MS
Biologist
Plant Ecology
Experimental Medical Branch
Biomedical Laboratory
Edgewood Arsenal, Maryland 21010
(301) 671-2247

B-6, C-6, E-1, E-3

--Plant survey of Edgewood Arsenal, Maryland -- Assessment of pesticide toxicity to plants

--Ecological damage assessment  $\underline{in}$   $\underline{vitro}$  of manufacturing wastes and by-products

\*505 Schultz, Leonard B. PhD
Curator of Fishes
Smithsonian Institution
Research Associate
Chesapeake Biological Laboratory
Solomons, Maryland 20688
B-1. B-5

--Biology of jellyfish --Fisheries biology

\*506 Schwartz, Frank Joseph PhD
Professor
Institute of Marine Sciences
University of North Carolina
Box 809
Morehead City, North Carolina 28557
(919) 726-6841

-- Sea turties -- Elasmobranchs

\*507 Scott, Frederic Robert MA
Proprietor
Scott Associates
513 Mutual Building
Richmond, Virginia 23219
(703) 643-4094

B-14, G-2, H-3

--Avian populations; including population fluctuations and reproductive rates of the Bald Eagle and of breeding populations of colonial herons and related species

\*508 Scott, Roy Francis

Biologist II

Maryland Department of Natural Resources
Fish and Wildlife Administration
State Office Building
Annapolis, Maryland 21401

A-1, B-9, H-2

--Fisheries biology, especially of the striped bass; including tagging studies, determination of levels of mercury and pesticides in the tissues, determination of the presence of Goezia, and study of the relationship of egg viability to size of the female

MSE

\*509 Scott, Russell Cecil
Proprietor
R.C. Scott Associates
513 Mutual Building
Richmond, Virginia 23219
(703) 643-4094
E-1, E-3, G-2, G-6

510 Scotton, Lewis Nailor MS
Research Assistant
Biology Division
School of Marine Science
University of Miami
10 Rickenbacker Causeway
Miami, Florida 33149
(305) 350-7334

B-5, B-8

--Fisheries biology; including the ecology and distribution of postlarval fishes of Southern Biscayne Bay,

Florida; larval systematics and ecology; and the effects of environmental stresses, including thermal effluents, on the occurrence of fish larvae

-- Conservation of the environment

511 Seamans, Richard Goss, Jr. BS
Chief, Inland and Marine Fisheries
New Hampshire Fish and Game Department
34 Bridge Street
Concord, New Hampshire 03301
(603) 271-2501

B-1, B-9, H-2

--Northern lobster stock studies, fin-fish inventory, and introduction and restoration of anadromous fish

\* 512 Seliger, Howard Harold PhD
Professor
Biology Department
Johns Hopkins University
Baltimore, Maryland 21218
(301) 366-3300 ext. 203

B-17, E-1, G-5

--Plankton ecology

-- Phytoplankton primary production

-- Effects of light on photosynthesis and phototaxis

--Measurements of spectral distributions of underwater light

\* 513 Shaw, William Neil BS
Fishery Research Biologist
Department of Commerce
National Marine Fisheries Service
Oxford, Maryland 21654
(301) 226-5193

A-1, B-2, B-12

-- Shellfish aquaculture and extension in Chesapeake Bay

\* 514 Shearer, Carol Ann PhD
Faculty Research Assistant
Botany Department
University of Maryland
H.J. Patterson Hall
College Park, Maryland 20742
(301) 454-3818

B-8, B-13, E-3

--Taxonomy, ecology, and physiology of estuarine fungi; including investigation of the role of fungi in the wetlands ecosystem and the effects of the discharge of heated water on fungal distribution

515 Shetton, Lewis Roller

Graduate Student

Department of Crustaceology

Virginia Institute of Marine Science

Gloucester Point, Virginia 23062

(703) 642-2111

B-1, B-9, B-12

--Biology of the rock crab, <u>Cancer irroratus</u>, in Virginia coastal waters

Shevenell, Thomas Cortland -Research Associate
Jackson Estuarine Laboratory and Earth Science
Department
University of New Hampshire
Durham, New Hampshire 03824
(603) 862-1719

D-1, D-8, Suspended sediment

--Transport of suspended sediments; including the relationships between suspended sediment distribution and the physical erosion and transport mechanisms such as current velocity, wind wave activity and net estuarine circulation on annual, daily and tidal cycle scales

517 Short, Robert B. PhD
Professor
Biological Science Department
Florida State University
Tallahassee, Florida 32306
(305) 599-3122

B - 15

--Structure and biology of trematodes --Biology of Dicyemid mesozoans

518 Shuster, Carl Nathaniel Jr. PhD
Ecologist
Office of Water Programs
Environmental Protection Agency
Crystal Mall, Building 2
Washington, D.C. 20460
(703) 557-7725

B-1, B-8, B-12

-- COnsiderations regarding overall environmental impacts
-- Natural history and ecology of Xiphosura

3.30 32. 4 V

519 Siegel, I. Myra

Assistant to the Director and Editor
TRIGOM
96 Falmouth Street
Portland, Maine 04103
(207) 773-2981 ext. 306

B-1, E-2, Data gathering and reporting, Marine science editing and writing

-- Marine ecology

--Invertebrate biology

--Plankton biology

--Writing, editing and abstracting for marine science publications, including literature research and bibliographic compilation

520 Siegel, Robert Edward MA
Instructor
Department of Marine Science
Southern Maine Vocational Technical Institute
Fort Road
South Portland, Maine 04106
(207) 799-7303 ext. 67
B-1, B-8, E-2

B-1, B-8, E-2
--Photographic record of the invertebrates of Casco Bay
--Littoral zone ecology

\*521 Sieling, Fred W. MS

Deputy Director

Fish and Wildlife Administration
State of Maryland
State Office Building
Annapolis, Maryland 21401
(301) 267-5678

A-1, B-1, B-2, B-5, B-8, B-9, B-12, C-4, C-7, D-1, D-8, E-1, F-6, G-2, H-2, H-3, Shellfish management --Studies of soft and hard clams, estuarine fish, and oyster ecology

522 Sieling, Frederick William III MA
Fisheries Extension Agent
Fish and Wildlife Administration
State of Maryland
State Office Building
Annapolis, Maryland 21401
(301) 267-5438
A-1, B-1, B-2, H-1, H-2, H-3

--Hard clam research, especially of population trends

Simmonds, Willard Irving Jr. HS
Chemist
Department of Limnology
Academy of Natural Sciences of Philadelphia
Benedict Estuarine Laboratory
Benedict, Maryland 20612
(301) 274-3194

C-9, Water chemical concentrations and associated plankton communities

--Estuarine concentrations of water chemical species, with emphasis on their horizontal and vertical distributions, and their associations with planktonic organisms

Simmons, George M. Jr. PhD

Assistant Professor of Biology
Biology Department
Virginia Polytechnic Institute and State
University
Blacksburg, Virginia 24061
(703) 552-6679
B-2, B-8, B-11, B-12, B-17, B-19, C-9, E-1, E-3,
F-6, G-6, G-7, H-2, H-3
--Eutrophication

\*525 Sipple, William Stanton MA
Natural Resource Planner
Wetlands Division
Department of Chesapeake Bay Affairs
State Office Building
Annapolis, Maryland 21402
(301) 267-5774

B-6, Wetland ecology
--Tidal wetlands studies; including geographical
distribution, distribution in relation to
salinity, amount of tidal inundation and
soil texture in vascular plants and ecological
effects of spoil disposal

\*526 Slaughter, Turbit H. MA
Geologist
Estuarine Geology
Maryland Geological Survey
214 Latrobe Hall
The Johns Hopkins University
Baltimore, Maryland 21218
(301) BE5-0771

--Sedimentation, erosion and littoral processes in the Chesapeake Bay and on the Atlantic Coast

Maria Carrier

527 Smayda, Theodore John PhD
Professor, Oceanography and Botany
Graduate School of Oceanography
University of Rhode Island
Kingston, Rhode Island 02881
(401) 792-6171

B-17, B-19, Phytoplankton

--Factors, including nutrients, grazing, and physical factors responsible for the seasonal cycles in phytoplankton abundance and species succession

--Bioassay of water masses

-- Physiological ecological studies of natural communities

-- Culturing of phytoplankton and zooplankton

--Quantitative explanations for a model of seasonal phytoplankton abundance and species succession in communities in general and in Narragansett Bay, Rhode Island in particular

528 Smith, Bruce William MS
Staff Biologist
Engineering Department
Public Service Company of New Hampshire
1000 Elm Street
Manchester, New Hampshire 03105
(603) 669-4000 ext. 429

B-2, B-8, B-12

--Aquaculture of commercially important species in thermally charged waters

--Entrapment of fish and invertebrates on power generating station intake screens

--Entrainment effects on estuarine plankton

\*529 Smith, Craig Lasalle PhD
Associate Marine Scientist
Division of Geological Oceanography
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 74

C-3, C-6, E-3

-- Marine organic chemistry

--Oil pollution

-- Effects and fate of oil spills

--Organic geochemistry of sediments

Smith, Richard Allmon

MS

PhD

MS

Research Associate

Department of Geography and Environmental

Engineering

The Johns Hopkins University

Charles and 34th Streets

Baltimore, Maryland 21218

(301) 366-3300 ext. 286

B-17, B-19, G-5

-- Phytoplankton production in the Chesapeake Bay region; including studies of production measurement techniques, diurnal periodicities in production rates, and effects of thermal discharges on phytoplankton production

-- Development of models describing phytoplankton production and growth as functions of controlling factors, with particular emphasis on the effects of temperature change

531 Smith, Roland Fred Administrator Chief, Division of Living Resources

Office of Marine Resources

Department of Commerce

NOAA

6010 Executive Building

Rockville, Maryland 20852

(301) 496-8472

B-1, B-8, B-9, Administration

-- Estuarine ecology

-- Coastal zone management

-- Fisheries biology

--Pollution studies

Smith, Ronal William

Resident Biologist

College of Marine Studies

University of Delaware

Drawer 286

Lewes, Delaware 19958

(302) 645-6676

A-1, B-5, B-8, B-9

-- Fin fish research

--Estuarine ecology of the Delaware Bay and the C and D Canal

\*533 Smith, Susan Kurrle

Biologist

Annapolis Field Office

Environmental Protection Agency

Annapolis Science Center

Annapolis, Maryland 21401

(301) 268-5038 ext. 23

B-1, B-8, B-17

--Studies of the different trophic levels of the estuarine community, especially of phytoplankton and fishes

534 Smith, Wade Barnes MA
Department of Environmental Engineering
University of Florida
Gainesville, Florida 32601
(904) 392-0834

B-8, B-19, G-5

--Structure and function of estuarine ecosystems
adapting to inputs due to the activities of man
--Utilization of principles of ecosystem self-design
to produce new systems capable of most effectively
serving as an interface between the waste flows
of man-dominated systems and estuaries

--Adaptations of estuarine systems to power plant thermal addition inflows

Head, Marine Science and Technology
Marine Science and Technology Department
Suffolk County Community College
College Road
Selden, New York 11784
(516) 732-1600 ext. 243
B-5, B-12, E-2

--Diseases of cold blooded animals

\*536 Sohn, I. Gregory PhD
Geologist
U.S. Geological Survey
Department of the Interior
Washington, D.C. 20242
(202) 343-2885

B-12
--Ostracoda studies

\*537 Sommer, Sheldon E. PhD
Assistant Professor
Geochemistry Division
Chemistry Department
University of Maryland
Chemistry Building
College Park, Maryland 20742
(301) 454-4413

B-8, C-1, C-3, D-1, D-2, D-3, D-7, D-8, E-2, E-3
--Geochemistry of marine and estuarine sediments
and associated fluids; including the chemical
nature and bonding character of metals in or on
clay minerals and organics, the formation and
alteration of mineral phases in the Bay sediments,
particularly FeS > FeS<sub>2</sub>, the dispersal patterns
of elements and sediments in the Bay watershed
and the application of electron microprobe analysis
and electron spectrometry to the study of estuarine
sediments and suspended particulate material

\*538 Sorokin, Constantine A. PhD
Research Professor
Botany Department
University of Maryland
College Park, Maryland 20742
(301) 454-3821 ext. 38
B-1, B-16, High temperature algae

--Physiology and biochemistry of phytoplankton, specifically temperature characteristics of phytoplankton and its performance at elevated temperatures

539 Soukup, Michael A. MS
Lecturer
Department of Zoology
University of Massachusetts
Amherst, Massachusetts 01002
(617) 253-5136
B-12, B-18, C-3

--Silica budgets for estuaries, especially the effects
of a decrease in silica concentration
--Life-histories of estuarine snails

\*540 Southwick, Charles H. PhD
Professor
Department of Pathobiology
The Johns Hopkins University
615 North Wolfe Street
Baltimore, Maryland 21205
(301) 955-3604

B-6, B-8, B-19
--Systematics and ecology of Eurasian watermilfoil
(Myriaphyllum spicatum) and other submerged
vascular plants in Chesapeake Bay; including
studies of water quality and other ecological
conditions such as factors inhibiting or
promoting the growth of aquatic vegetation,
documentation of seasonal and annual fluctuations
in the abundance and distribution of these
species and net productivity studies

\*541 Speir, Harley Joseph MS
Biologist II
Maryland Department of Natural Resources
Fish and Wildlife Administration
State Office Building
Annapolis, Maryland 21401

B-9, E-1, H-2

--Fisheries biology; including determination of anadromous fish associated with wetlands; their seasonal variability of occurrence; estimation of their standing crop; their relationships with wetland dependent competitors, predators, and forage species; and their association with the chemical and physical characteristics of the wetland aquatic habitat

--Baseline study of the chemical and physical characteristics of the wetland aquatic habitat

\*542 Sprague, Victor PhD
Research Professor
Natural Resources Institute
University of Maryland
P.O. Box 38
Solomons, Maryland 20688
(301) 326-4281

B-12, B-15, G-6, Invertebrate pathology, Protozoology -- Taxonomy, morphology, life cycle, and host-parasite relations of protozoan parasites of estuarine animals, especially of the Microsporida and Haplosporida in decapods and bivalve molluscs

\*543 St. Pierre, Richard Alan MS
Assistant Marine Scientist
Department of Ichthyology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 64

B-5, B-9, B-18

--Fisheries biology; including population dynamics, life history studies, and larval fish culture

and maintenance--Productivity analyses--Plankton identification and enumeration

\*544 Staley, Thomas Edwin PhD
Post-Doctoral Research Fellow
Biology Department
Georgetown University
37th and O Streets N.W.
Washington, D.C. 20007
(202) 625-4126

B - 13

--Analysis of polynucleotide sequence relationships among strains of Vibrio parahaemolyticus from various areas of Chesapeake Bay and genetic comparisons of these strains with ones causing human infections in Japan and in Cambridge, Maryland

545 Steenis, John Holt

Consultant Biologist

RFD 2, Box 118

Warren, Maine 04864

B-6, B-8, B-14, B-19

--Ecological investigations on submersed vegetation

to determine how to improve and manage it not
only for waterfowl feeding but also for preservation

546 Stenger, John R. MA
President
Environmental Education and Protection
126 Gills Neck Road
Lewes, Delaware 19958
(301) 645-8354
B-1, B-6, B-11, D-1, E-1, E-3, G-6, H-2

of biotic balance

547 Stenzel, Henryk Bronislaw PhD
Consulting Professor
Geology Department
Louisiana State University
Baton Rouge, Louisiana 70803
(504) 388-2131
B-9, B-12, Paleontology, Phylogeny
--Taxonomy and phylogeny of oysters

548 Stibult, Kenneth Allan MSME
Assistant Professor
Ocean Engineering Technology
Anne Arundel Community College
101 College Parkway
Arnold, Maryland 21012
(301) 647-7100 ext.273

A-2, E-2, C-6

--Program development to train research assistants in marine biology

549 Stieber, Michael Thomas MS
Graduate Teaching Assistant
Botany Department
University of Maryland
College Park, Maryland 20742
(202) 454-3812

B – 6

--Taxonomy of vascular plants of Anne Arundel County,
Maryland, especially that of the grasses (Gramineae)

550 Stolworthy, Edward Howard
Professor Emeritus
Engineering Design and Analysis Laboratory
University of New Hampshire
Durham, New Hampshire 03824
(607) 862-1356

A-2, B-2, Underwater research habitat studies

551 Strathmann, Richard R. PhD
Assistant Professor
Zoology Department
University of Maryland
College Park, Maryland 20742
(301) 454-5450

B-1, B-8, B-12, B-17

--Invertebrate biology; including studies of life cycles and of larval biology and ecology of filter feeders

\*552 Sulkin, Shelley Turpin BS
Faculty Research Assistant
Environmental Research
University of Maryland
Chesapeake Biological Laboratory
Solomons, Maryland 20688

B-1, B-8, B-12

--Determination of primary productivity in Chesapeake
Bay waters surrounding a nuclear power plant
--Nutrient analysis of sea water in a closed ecosystem

\*553 Sulkin, Stephen David PhD
Research Assistant Professor
Natural Resources Institute
University of Maryland
Chesapeake Biological Laboratory
Solomons, Maryland 20688
(301) 326-4281 ext.66

B-8, B-9, B-12

--Population dynamics of <u>Callinectes</u> <u>sapidus</u> in the Chesapeake Bay; including studies of abundance of various size-classes in order to develop a predictive model of the future commercial catch, of the influence of temperature and diet upon the reproductive potential of adults, and of the influence of natural diets upon the survival and growth of larvae

Sullivan, Kevin J. PhD

Assistant Director
Chesapeake Bay Center for Environmental Studies
Smithsonian Institution
Route 4, Box 622
Edgewater, Maryland 21037
(301) 798-4424

H-1, H-2, H-3

--Land-use planning studies

-- Public participation studies

--Research in decision-making processes

555 Suydam, Ervin Lynn EdSp Instructor

Marine Science Department Rappahannock Community College Glenns, Virginia 23149

A-1, B-9, B-15, G-6

--Studies of fish gill parasites, especially of monogenetic trematodes

-- Marine science curriculum

556 Swan, Emery F. PhD
Professor
Zoology Department
University of New Hampshire
Spaulding Building

Durham, New Hampshire 03824

(603) 862-2100

B-1, B-12

-- Growth and variation of sea urchins

-- Environmental effects on spicules of calcareous sponges

557 Swartz, Richard Carlyle PhD
Associate Marine Scientist
Department of Ecology Pollution
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.28

B-1, B-12, Ethology

--Ethology and ecology of aquatic animals, especially estuarine mud crabs (Xanthidae, Brachyura)

Research Oceanographer
Atlantic Oceanography and Meterology Laboratory
NOAA
901 S. Miami Avenue
Miami, Florida 33130
(305) 350-4195
D-1, D-8

--Sedimentation at the Chesapeake Bay mouth and adjoining continental shelf

559 Swift, Dorothy G. MA
Graduate Student
The Johns Hopkins University
Earth and Planetary Sciences Department
Graduate School of Oceanography
University of Rhode Island
Kingston, Rhode Island 02881
(401) 792-6173

B-6, B-17, E-2

--Nutritional studies, with emphasis on vitamin metabolism, of marine diatoms of the genera Thalassiosira and Chaetoceros, isolated from the Gulf of Maine

560 Szekielda, Karl Heinz PhD
Assistant Professor
Chemical Oceanography
University of Delaware
Newark, Delaware
(302) 738-1212

C-2, C-3, C-4
--Accumulation of surfactive compounds in ocean fronts
--Analysis of surface aggregates (films, foam) for
inorganic and organic compounds

Fishery Research Biologist
Gulf Breeze Laboratory
Environmental Protection Agency
Sabine Island
Gulf Breeze, Florida 32561
(904) 932-5326

B-5, B-8, E-3

--Effect of pesticides on experimental ecosystems
--Biology of the blue crab, menhaden, and anadromous
fish

--Survey of estuarine fishes

562 Taylor, Jonathan E. PhD
Assistant Professor
College of Marine Studies
University of Delaware
Newark, Delaware 19711
(302) 738-1212

B-6, B-19, Systems ecology

-- Ecology and physiology of benthic algae

-- Ecology of marine "grasses"

--Primary productivity of phytoplankton and benthic algae

--Systems ecology of estuaries and lagoons

\*563 Ten Broeck, Craig William MS
Natural Resources Planner
Planning and Evaluation Section
Maryland Department of Natural Resources
State Office Building
Annapolis, Maryland 21401
(301) 267-5767

B-8, H-2, H-3

--Program design for the coastal zone management program of Maryland

--Creation of recreational access to the Chesapeake Bay

PhD
Postdoctoral Investigator
Biology Department
Woods Hole Oceanographic Institution
Woods Hole, Massachusetts 02543
(617) 548-1400 ext. 301

B-2, B-8, G-6, Benthic ecology

-- Macrobenthic community studies

--Relationship of community structure to function (energetics)

--Determination of detrital food chains of deposit feeding benthos

Assistant Professor
Biology Department
Salem-State College
Lafayette Street
Salem, Massachusetts 01970
(617) 745-0556 ext.376
B-1, B-8

566 Thayer, Gordon Wallace PhD
Fishery Biologist Project Leader
Department of Commerce
NMFS
Atlantic Estuarine Fisheries Center
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595 ext.45

B-8, B-12, B-17

--Nutrient limiting factors and the influence of detritus on the competition between phytoplankton and bacteria for nutrients

--Phytoplankton and algal production -- Energy content of estuarine organisms

-- Energetics of benthic invertebrate populations and energy flow in benthic and seagrass communities

--Influence of temperature changes on metabolism, survival, and energetics of benthos and of plankton

567 Thomas, David Laurence PhD
Project Leader
New Jersey Marine Ecological Study
Ichthological Associates
West Brook Lane
Box 70 D RD 2
Absecon, New Jersey 08201
(609) 646-8366

B-1, B-5, B-8

--Fisheries biology; including the ecology and early life history studies of the drums (Sciaenidae) in the lower Delaware River

--Broad ecological study in conjunction with a proposed offshore nuclear generating station

\*568 Thompson, Jesse C. Jr. PhD
Chairman
Biology Department
Roanoke College
Salem, Virginia 24153
(703) 389-2351 ext.271

Protozoology -- Taxonomy and morphology of ciliated Protozoa

Thurberg, Frederick P. PhD
Research Physiologist
NOAA
National Marine Fisheries Service
Rogers Avenue
Milford, Connecticut 06460
(203) 878-2459
B-12, B-16, E-3

-- Effects of marine contaminants on oxygen consumption and osmoregulation of crustaceans and molluscs -- Physiology of marine biotoxins

570 Tietjen, John H. PhD
Associate Professor
Biology Department
City College of New York
Convent Avenue at 138 Street
New York, New York 10031
(212) 621-2549

B-8 --Physiological ecology of estuarine meiofauna, especially of free-living nematodes

Associate Professor
Biology Department
Charles County Community College
Box 910
Mitchell Road
LaPlata, Maryland 20646
(301) 934-2251 ext.77
B-8, B-18, B-19, C-7, C-9, E-1, E-3, F-6, G-6, H-2
--Conducting two-year training curriculum for estuarine research technicians

572 Tischler, Herbert PhD
Professor and Chairman
Earth Sciences Department
University of New Hampshire
James Hall
Durham, New Hampshire 03824
(603) 862-1718
B-12, B-13, E-3
--Benthic Foraminifera in Great Bay, New Hampshire

573 Truitt, Reginald VanTrump PhD
Founder and Director
Chesapeake Biological Laboratory
Maryland Department of Research and Education
State of Maryland
Solomons, Maryland 20688

A-1, B-5, B-9, H-2
--Molluscan and crustacean studies

\*574 Tubiash, Haskell Solomon MS
Research Microbiologist
National Oceanic Atmospheric Agency
National Marine Fisheries Service
Biological Laboratory
Oxford, Maryland 21654
(301) 226-5193

B-8, B-13, E-3

--Microbiology; including the role of microorganisms in animal diseases and the effect of V. parahemolyticus and other vibrios on recruitment of commercial mollusks and crustaceans

575 Turegeon, Kenneth Wayne MA
Teaching Assistant and Instructor
Zoology Department
University of New Hampshire
Spaulding Life Science Building
Durham, New Hampshire 03824
(607) 862-2175

B-1, B-8, B-16

--Comparative study of osmotic adjustment mechanisms between two populations of marine, prosobranch gastropods (Urosalpinx)

--Physiological responses of marine invertebrates to environmental stress conditions

--Possible existence of molluscan pheramones

-- Supplemental feeding of oysters with carbohydrates

\*576 Uhler, Francis Morey BA
Biologist (Semi-retired)
Patuxent Wildlife Research Center
USDI
Bureau of Sport Fisheries and Wildlife
Laurel, Maryland 20810
B-6, B-8, B-12, B-14

--Factors affecting the waterfowl feeding grounds along the Chesapeake Bay and its tributaries

\*577 Ukeles, Ravenna PhD
Research Microbiologist
Algal Studies
National Marine Fisheries Service
Milford, Connecticut 06460
(203) 878-2459

A-4, B-1, B-2, B-8, B-13, B-17, C-2, C-8, E-3, G-2
--Nutrition and physiology of estuarine micro-algae
and Protozoan species and feeding processes
in larval invertebrates

Secretary Constitution

578 Ulanowicz, Robert Edward PhD
Research Assistant Professor
Natural Resources Institute
University of Maryland
P.O. Box 38
Solomons, Maryland 20688
(301) 326-4281 ext, 73

B-18, C-4, G-5

--Ecosystems modeling; including modeling of the population dynamics of the producer and herbivore components of estuarine planktonic systems --Prototype data acquisition of tidal currents and salinities in Chesapeake Bay

\* 579 Ustach, Joseph F. MS
Faculty Research Assistant
Natural Resources Institute
University of Maryland
Box 38
Solomons, Maryland 20688
(301) 326-4281 ext.44

B-1, B-8, B-17
--Detritus and associated organisms and their role in trophic structure

Professor of Rotany
Biology Department
North Shore Community College
3 Essex
Beverly, Massachusetts 01915
(617) 927-4850

B-6, E-3, G-2

--Salt marsh research in Massachusetts; including flora, fauna, chemical composition and human history studies

NS
Research Assistant
Department of Oyster Culture Zoology
Rutgers University
New Brunswick, New Jersey 08903
B-8, B-12, B-15
--Shellfish pathology; including disease resistance of oysters

\* 582 Van Engel, Willard A. PhD
Senior Marine Scientist
Department of Crustaceology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111

B-1, B-8, B-9

--Blue Crab biology; including estimations of mortality rates, growth rates and recruitment rates; studies of migration, and predictions of the commercial catch in Chesapeake Bay and its tributaries

--Identification and estimation of numbers of smallsized crustacean plankton found in open waters of Chesapeake Bay and over continental shelf waters

-- Ecological studies on mud crabs, with special reference to the effects of parasitism by sacculinids

--Study of methods for rearing crustaceans in the laboratory

\* 583 Van Valkenburg, Shirley Dawn PhD
Assistant Professor
Botany Department and Chesapeake Biological
Laboratory
University of Maryland
College Park, Maryland 20742
(301) 454-3821

B-1, B-6, B-17, Phytoplankton taxonomy and culture, Ultrastructure of chrysophytes

--Micro-flagellate phytoplankton studies, especially of Chrysophyta

\* 584 Vaughn, Moses W. PhD
Professor of Food Technology
Agriculture Department
University of Maryland Eastern Shore
Box 1048
Princess Anne, Maryland 21853
(317) 651-2200

B-8, C-9, E-1, E-3, G-6

--Studies of nitrogen partitions in fishmeals

--Determinations of microorganisms in fishery products preserved with ionizing radiations

--Studies of the significance of the bacterial flora in bottom muds

--Washing shell stock and handling shucked oysters to bacterial quality

--Microwave opening of oysters and commercial processing operations

Verber, James Leonard

Captain

Northeast Technical Service Unit

HEW-PHS

FDA

CBC Building S-26

Davisville, Rhode Island 02854

(401) 267-2307

E-2, E-3, F-6

--Pollution studies, especially on shellfish

586 Vernberg, F. John PhD
Professor and Director
Baruch Institute
University of South Carolina
Columbia, South Carolina 29208
(803) 777-5288

B-1, B-8, B-16

--Studies of interaction of environmental factors and functional response of animals --Physiological ecology

587 Vernberg, Winona B.

Research Professor

Baruch Coastal Research Institute
University of South Carolina
Columbia, South Carolina 29208
(803) 777-5288

B-8, B-16, E-3

--Synergistic effects of mercury and environmental factors on the survival, metabolism and behavior of all stages in the life cycle of the fiddler crab, Uca pugilator

--Effects of water exposed to sediments from the Charlestown Harbor area on larval zooplankton

\*588 Villa, Orterio

Chemist, Chief Development Laboratory
Annapolis Field Office
Environmental Protection Agency
Annapolis Science Center
Annapolis, Maryland 21401
(301) 268-5038 ext.29

C-1, C-9, E-3

-- Nutrient chemistry of estuaries

--Sources, cycles and sinks of macro-and micro-nutrients and their effects on the biota

Staff Officer, Coastal Affairs
Division of River Basin Studies
Bureau of Sport Fisheries and Wildlife
Department of the Interior
Washington, D.C.

G-2, H-2, Resource protection

THE WASHINGTON

--Protection of the estuarine habitat from the effects of navigation channel formations, nuclear power plants, and of dredge and fill projects

590 Wall, William James Jr. PhD
Professor
Biology Department
Bridgewater State College
Bridgewater, Massachusetts 02324
(617) 697-6167 ext. 317

B-8, B-12, C-7, Entomology

--Direct and indirect effects of pesticides on intertidal organisms

--Identification of invertebrates, particularly insects, associated with bloodsucking Diptera in intertidal areas

--Control of blood sucking Diptera breeding in intertidal areas, particularly of <u>Tabanus</u> spp.

591 Waller, Richard A. MS
Fish and Wildlife Administrator
Office of Environmental Quality
Bureau of Sport Fisheries and Wildlife
Department of the Interior
Washington, D.C. 20240
(202) 343-6913

B-1, B-8, B-12, C-4, C-9, D-8, E-1, E-2, E-3, H-2, H-3, Power plant siting

592 Waller, Thomas Richard
Associate Curator
Department of Paleobiology
Smithsonian Institution
Washington, D.C. 20560
(202) 381-5370

B-4, B-12, Paleontology

-- Evolution, living habits, functional morphology, and systematics of molluscs, particularly the family Pectinidae

593 Wang, Johnson C.S.

Senior Research Biologist
Ichthyological Associates
P.O. Box 35, RD 2
Middletown, Delaware 19709
(302) 378-8877

B-1, B-2, B-5, B-8, B-9, B-13, B-20

--Fisheries biology on adults, larvae and eggs; including distribution, quick thermal changes on larvae and effects of suspended sediments on eggs, especially in the Chesapeake and Delaware Canal region

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B-8, B-20, Wildlife diseases
 --Measurements of the environmental impact of research and developmental activities at Edgewood Arsenal on estuarine ecosystems

595 Warinner, Junius Ernest MA
Assistant Marine Scientist
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext.30

B-19, E-3, F-6
--Primary productivity studies, with particular interest in the red water bloom phenomena, its initiation, propagation, and demise

--Studies of thermal effects and power plant siting criteria

596 Warlen, Stanley Milfred MS
Fishery Biologist
U.S. Department of Commerce
National Marine Fisheries Service
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595

B-5, B-8, C-7

-- Fisheries biology

--Estuarine ecology

--Pollution biology; including pesticide and insecticide effects on estuarine organisms, especially studies on the accumulation of organochlorine insecticides by Atlantic menhaden during their estuarine existence (first year) in Newport River, North Carolina, particularly measuring uptake and loss rates of C<sup>14</sup>-pp DDT by larval and juvenile menhaden and monitoring levels of certain insecticides in plankton, sediments, and filtered water

\*597 Warneke, Mary Linton BA
Faculty Research Assistant
Chesapeake Biological Laboratory
Univeristy of Maryland
Box 212, Route 2-4
Solomons Island, Maryland 20688
(301) 326-3446

Mad Shapen and

B-8, C-1, E-3
--Bay ecology, especially of chemical factors involved
 in pollution

\* 598 Wass, Marvin L. PhD
Associate Marine Scientist
Biological Oceanography
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 83

B-8, B-12, Wetlands

--Studies of benthic invertebrates; including determinations of macroinvertebrate infauna of dredged areas, of bottoms enriched by sewage, of inshore continental shelf communities, and of eel grass beds, and of epifauna of Zostera and Sargassum; ecology of gammarid amphipods, of Rangia and chaetognaths; systematics of Bittium; life history study of Rangia; and reproductive biology of Littorina --Wetlands research

599 Watling, Lee E. MS
Resident Biologist
College of Marine Studies
University of Delaware
P.O. Drawer 286
Lewes, Delaware 19958
(302) 645-8489

B-4, B-8, B-12 --Benthic ecology

-- Taxonomy and ecology of benthic invertebrates in Delaware Bay and in the coastal lagoons of this state

600 Watson, George Elder PhD
Chairman
Department of Vertebrate Zoology
Smithsonian Institution
National Museum of Natural History
Washington, D.C. 20560
(202) 381-6127

B-14 --Distribution and ecology of marine birds in relation to environmental factors 601 Webb, Kenneth Louis PhD
Associate Marine Scientist
Department of Environmental Physiology
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 34

B-8, B-16, C-2

--Studies of dissolved organic compounds and their flux, especially of nitrogenous compounds; including aspects of the nitrogen cycle in relation to the plankton community

602 Webber, Edgar Ernest PhD
Associate Professor
Biology Department
Keuka College
Keuka Park, New York 14478

--Systematics, ecology, and life history studies of benthic algae of salt marshes

\*603 Weck, Susan Gale

Botanist

Chesapeake Bay Center for Environmental Studies
Smithsonian Institution
Box 622 Route 4
Edgewater, Maryland 21037
(301) 798-4424

E-1, G-1, Remote sensing

--Environmental monitoring and data collecting using remote sensing and other aerial techniques

604 Wentzell, Paul Clifford

Lieutenant
Maryland State Marine Police
Maryland Department of Natural Resources
State of Maryland
Annapolis, Maryland 21404
(301) 267-5181

A-1, H-2, Marine and conservation law enforcement --Marine conservation, especially of fin fish, crabs, oysters, clams, soft shell clams and terrapins

605 Whaley, Horace Henry

Marine Superintendent
Chesapeake Bay Institute
The Johns Hopkins University
Baltimore, Maryland 21218
(301) 268-5231

\*606 Whaley, Richard Charles MA
Associate Research Scientist
Oceanography Department
The Johns Hopkins University
Charles and 34th Streets
Baltimore, Maryland
(301) 268-5231
A-2, B-8, B-17, B-19, C-4, C-9, D-8, E-2
--Plankton ecology

\*607 Wheaton, Frederick Warner PhD
Research Associate
Agricultural Engineering Department
University of Maryland
College Park, Maryland 20742
(301) 454-3901

A-2, B-2, F-4

-- Engineering research in the seafood industry; including developing a technique and the necessary equipment to mechanize oyster shucking of Chesapeake Bay oysters

--Development of closed cycle systems for raising aquatic organisms; including growing oysters fed with a non-algal food

608 Wheeler, Ellsworth H. PhD
Assistant Professor
Zoology Department
University of New Hampshire
Durham, New Hampshire 03824
(603) 862-2112

B-17, B-18, E-2, Deep sea biological oceanography -- Estuarine zooplankton, particularly of Copepoda, including systematics and general ecology

\*609 Wheeler, Richard Hoelzen

Biologist

Wetlands Division

Department of Natural Resources

State Office Building

Annapolis, Maryland 21401

(301) 267-5774

B-6, B-8, Wetlands ecology
--Studies on the tidal wetlands in Maryland; including
the geographical distribution of vascular plants,
especially in relation to salinity; the amount
of tidal inundation and soil texture; and the
ecological effects of spoil disposal

\*610 Whitcomb, James Paul

Assistant Biologist

Department of Applied Biology

Virginia Institute of Marine Science

Gloucester Point, Virginia 23062

(703) 642-2111 ext.85

B-1, G-7

--General clam survey

\*611 White, John Conner Jr. MS
Chief Biologist
Environmental Control
Virginia Electric and Power Co.
P.O. Box 26666
Richmond, Virginia 23621
(703) 771-3389

B-8, E-1, H-3

--To insure an adequate power supply with a minimum of environmental impact

\*612 Wiemeyer, Stanley N. MS
Research Biologist
Department of the Interior
Bureau of Sport Fisheries and Wildlife
Patuxent Wildlife Research Center
Laurel, Maryland 20810
(301) 776-4880 ext. 261

B-14, B-18, E-3

--Population trends and reproductive success of ospreys on a tidal portion of the Potomac River, including possible effects of environmental pollutants

--Bald eagle populations and reproductive success in the Chesapeake Bay area; including determination of the levels of environmental pollutants in them with relation to their reproductive success

613 Wilcox, Churchill Klages MS
Teaching Assistant
General Education Department
Harvard University
Cambridge, Massachusetts 02138
and

Lecturer
Civil Engineering Department
Tufts University
Medford, Maine 02155

G-5, G-6, Gas exchange across air-sea interface
--Construction of a simulation model of the carbon dioxide balance among the atmosphere, ocean and bioshpere in order to investigate the effects of increasing concentrations of earbon dioxide on the world climate

-154-

614 Wilcox, J. Ross
Instructor
Graduate School of Oceanography
University of Rhode Island
Kingston, Rhode Island 02881
(401) 792-6281

B-1, B-8, B-12

--Biology and feeding habits of the sand shrimp, Crangon septemspinosa

\*615 Wiley, Cloyde William Jr. BA
Director
Bureau of Shellfish Sanitation
Virginia State Health Department
109 Governor Street
Richmond, Virginia 23219
(703) 770-6277

B-10, C-9, E-1

--Administration in the state shellfish sanitation control program

\*616 Wiley, Martin Lee PhD
Research Assistant Professor
Natural Resources Institute
University of Maryland
Box 38
Solomons, Maryland 20688
(301) 326-4281
B-5, B-8, B-9

--Fisheries biology and ecology

617 Wilk, Stuart J.

Fishery Biologist (Research)
National Marine Fishery Service
Sandy Hook Marine Laboratory
Fort Hancock
Highlands, New Jersey 07732
(201) 872-0200 ext.34

B-5, B-9, B-18

--Fisheries biology; including the distribution, age, growth, population characteristics, food habits, and states of maturity of the following sciaenid species: weakfish, Atlantic croaker, spot and Northern and Southern kingfish; the morphometric and meristic analysis of the following species to define stocks and/or races: summer flounder, Gulf flounder, Southern flounder, and bluefish; and the continuation of an ongoing survey of coastal fishes

618 Wilkens, E. Peter H.

Fishery Biologist
National Marine Fishery Service
S.E. Fishery Center
75 Virginia Beach Drive
Miami, Florida 33149
(308) 361-5761

B-5, B-9, B-17

--Fisheries biology; including abundance, distribution and early life history studies

\*619 Williams, Arthur Hilton MS
Anadromous Project Leader
Fisheries Division
Louisiana Wildlife and Fisheries Commission
P.O. Box 426
Ferridat, Louisiana 71334
(318) 757-4571

B-9

--Fisheries biology; including investigations of the striped bass which are native to the Chesapeake Bay and how they differ from more southerly races

\*620 Williams, Austin B. PhD
Systematic Zoologist
Systematics Laboratory
Department of Commerce
NMFS
U.S. National Museum
Washington, D.C. 20560
(202) 381-5923

B-8, B-12, Systematics of decapod crustaceans --Systematics and ecology of decapod crustaceans --Temporary plankton of estuaries

621 Williams, David Harry MS
Instructor in Biology
Science Department
Anne Arundel Community College
101 College Parkway
Arnold, Maryland 21012
(301) 647-7100 ext. 320
B-8, B-18, E-3
--Plankton sampling and analysis
--Benthic invertebrates

--Fisheries biology --Animal behavior \*622 Williams, Jerome MA Associate Professor Environmental Sciences Department U.S. Naval Academy Annapolis, Maryland 21402 (301) 267-3561 A-2, F-1, F-5, G-6

--Optical properties of estuarine waters -- Instrumentation -- Estuarine dynamics

623 Willims, Richard Birge PhD Leader Estuarine Energetics Program Atlantic Estuarine Fisheries Center National Marine Fisheries Service Beaufort, North Carolina 28516 (919) 728-4595 B-8, B-17, B-19, G-5

Willingham, Charles Allen PhD Senior Marine Biologist Marine Sciences Department Wm. F. Clapp Laboratory of Battelle Washington Street P.O. Box 1637 Duxbury, Massachusetts 02332

(617) 934-5684

B-8, B-13, E-3

-- Ecology of estuarine areas as it pertains to dredgefill activities and thermal additions from power plants

--Microbial ecology of submerged surfaces of the mud/water interface

\*625 Wilson, Woodrow Lee ńS Laboratory Specialist Department of Ichthyology Virginia Institute of Marine Science Gloucester Point, Virginia (703) 642-2111 ext, 64 A-1, B-9, B-18

-- Fisheries biology, especially of anadromous fishes

626 Windsor, John Golay Jr. MA Research Assistant Department of Geochemical Oceanography Virginia Institute of Marine Science Gloucester Point, Virginia 23062 (703) 642-2111 ext. 78 C-1, C-6, C-7

--Air-sea and sea-bottom interactions

\*627 Winn, Paul Norfleet MS
Research Professor
Agricultural Engineering Department
University of Maryland
College Park, Maryland 20742
(301) 454-3901

A-2, B-2, E-3

--Fisheries biology; including studies of the physical parameters of temperature, water quality, feed disease control, light, stocking density and waste disposal required for the extended operation of a closed cycle system for optimum production of fin fish

628 Wiper, Harold A. MS
Science Teacher
Science Department
Newton High School
Palmer House
Walnut Street
Newtonville, Massachusetts (617) 969-9810 ext. 225
B-1, E-2, G-6

\*629 Wojck, Frank John MS
Assistant Marine Scientist
Department of Statistics and Data Processing
Virginia Institution of Marine Science
Gloucester Point, Virginia 23062

(703) 642-2111

B-9, B-12, G-1
--Data processing and data analysis

--Life history of the blue crab

--Life history of the Alaskan grayling

630 Wolfe, Douglas Arthur

Director, Division of Ecology
Atlantic Estuarine Fisheries Center
NOAA

National Marine Fisheries Service
Pivers Island
Beaufort, North Carolina 28516
(919) 728-4595

B-8, C-1, E-3
--Accumulation of trace elements, heavy metals and radionuclides by estuarine organisms, flux of these materials through estuarine ecosystems, and their effects upon organisms and ecosystems

The same of the sa

\* 631 Wood, John Langille PhD
Associate Director
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext. 41
B-1, B-13, Administration of research
--Administration of research, marine biology, and marine microbiology of Chesapeake Bay, its tributaries and the continental shelf

632 Wood, Lindsay Wallace PhD
Postdoctoral fellow
Department of Zoology
University of Toronto
25 Harbord Street
Toronto, 5 Ontario
Canada

B-1, C-1, E-3

--Role of microbes and benthos in the cycling of organic solutes and other nutrients at the sediment water interface

--Studying both polluted systems and less polluted systems with regard to the controls and processes in order to determine the effects of enrichment or alternations in loading

633 Wood, Richard Dawson PhD
Professor
Botany Department
University of Rhode Island
Kingston, Rhode Island
(401) 792-2161

B-6, B-8, Aquatic plant ecology

--Algae, both macro and micro, of estuarine water; including their systematics, ecology, seasonal periodicity, interacting associations, and measurable factors

634 Woods, William Joseph
Associate Professor
Institute of Marine Sciences
University of North Carolina
P.O. Drawer 809
Morehead City, North Carolina 28557
(919) 726-6841

B-8, B-17, B-19, C-4, C-8, E-2, G-6

--Productivity

-- Nutrient cycling

--Plankton ecology

--Relationship between water chemistry and plant composition

-- Availability of primary producers as food

-- Energy flow through the food chain

635 Woodson, Bernard Robert Jr.
Professor

Biology Department Virginia State College Petersburg, Virginia 23803

(703) 526-2868 B-6, B-17, B-19, C-7, E-1, G-6

-- Algal systematics and productivity

--Effects of pesticidal concentrations on algal development in the laboratory environment

PhD

\*636 Worthley, Elmer George PhD
Biologist
U.S. Department of the Army
BioMedical Laboratory
Edgewood Arsenal
Experimental Medicine Branch
Edgewood Arsenal, Maryland 21010
(301) 671-2247

B-6, B-8, E-1

--Plant life near Edgewood Arsenal, Maryland; including any effects on it that might be caused by either actual or potential pollution

637 Wright, Richard Thomas PhD
Professor of Biology
Biology Department
Gordon College
Wenham, Massachusetts 01984
(617) 927-2300 ext 262

B-13, B-17, B-19

--Influence of mixing in a tidal estuary on the uptake of organic solutes by planktonic and sediment bacteria, and on the transformation of that organic matter into new cells or into constituent minerals

Assistant Watershed Manager
Maryland Department of Water Resources
State Office Building
Annapolis, Maryland 21401
(301) 267-5677
B-9. C-9. E-3

639 Yeo, Harry William PhD
Principal Assistant
Telstar Regional High School
SAD 44
Bethel, Maine 04217
(207) 824-2366
B-6, B-17, E-3, G-6

-- Phytoplankton speciation as it relates to water quality

\* 640 Yorgiadis, Strati

Senior Sanitary Engineer
Sheppard T. Powell Associates
501 Saint Paul Place
Baltimore, Maryland 21202
(301) 685-3210

E-1, E-3, F-6, G-7, Consulting engineers
--Hydrographic studies and meterological studies in rivers and estuaries

\*641 Zaneveld, Jacques Simon
Professor
Institute of Oceanography
Old Dominion University
Box 6173
Norfolk, Virginia 23508
(703) 489-8000 ext. 456

B-1, B-8, E-2

--Study of the trophic-dynamic system of the Lower Chesapeake Bay; including productivity determinations

PhD

--Taxonomy, ecology, morphology, geographical distribution, and aquaculture of benthic marine seaweeds

642 Zottoli, Robert A. PhD
Associate Professor
Biology Department
Fitchburg State College
Fitchburg, Massachusetts 01420
(617) 343-6417 ext, 311

B-1, B-8, B-12

--Taxonomy of polychaetes, especially of the family Ampharetidae

--Boring mechanism of Polydora websteri

\*643 Zubkoff, Paul L. PhD
Senior Marine Scientist and Head
Environmental Physiology Department
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111 ext 33

B-17, C-2, Radiobiology

--Application of biochemical principles and methodologies for investigating various aspects of the estuarine ecosystem; including studies of the phenomenon of "red water" development, primary productivity potential and heterotrophy of the estuarine ecosystem; biochemistry of the lipids, enzymes, and pigments of the jellyfishes, of the lipids and pigments of phytoplankton and of the lipids and proteins of zooplankton; and use of radioactive tracers with plankton

#644 Zwerner, David E. MA
Assistant Marine Scientist
Parasitology Section
Virginia Institute of Marine Science
Gloucester Point, Virginia 23062
(703) 642-2111
B-8, B-15, Diseases of fishes

B-8, B-15, Diseases of fishes
--Fisheries biology; including organisms causing fish
diseases and the distribution of fish ectoparasites,
especially of monogenetic trematodes and parastic
copepods

A Comment

# CATEGORICAL INDEX OF PERSONNEL BY KEYWORD RESEARCH INTERESTS

The personnel included in this inventory have been listed in alphabetical order, and each scientist has been assigned a number. The Keyword designations for research interests were assigned letters for the general interest areas and numbers for the subdivisions within these interest areas. Thus, "B-8" indicates (B) "Biological Sciences, (8) Estuarine Ecology." The list of numbers following "B-8" refer to the scientists in the inventory who have designated "B-8" as a research interest. For example, number 5 follows "B-8" and therefore, Sidney Marshall Adams (scientist number 5 in the inventory) is interested in Estuarine Ecology.

# A Applied (Industrial/Commercial)

## A-1 Commercial fishing

13, 28, 89, 92, 94, 97, 143, 148, 189, 199, 215, 232, 236, 249, 284, 300, 308, 312, 325, 330, 345, 349, 358, 367, 416, 417, 456, 475, 508, 513, 521, 522, 532, 555, 573, 604, 625

# A-2 Engineering & Instrumentation

31, 35, 52, 174, 194, 215, 272, 320, 359, 375, 488, 498, 548, 550, 606, 607, 622, 627

#### A-3 Fish Processing

42, 105, 199, 215, 356, 416, 435

# A-4 Seaweed Extractives

215, 344, 428, 577

# B Biological Sciences

# B-1 Marine Biology (general)

7, 8, 13, 14, 19, 30, 35, 40, 48, 66, 69, 76, 77, 82, 83, 89, 90, 91, 93, 97, 98, 101, 105, 109, 110, 117, 121, 123, 125, 127, 129, 132, 137, 142, 147, 155, 156, 169, 170, 171, 172, 173, 183, 186, 187, 188, 204, 205, 211, 213, 217, 221, 224, 232, 237, 241, 244, 248, 261, 270, 275, 277, 282, 283, 284, 287, 291, 303, 304, 314,

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315, 330, 338, 339, 340, 353, 364, 367, 368, 380, 390, 394, 402, 407, 410, 423, 427, 439, 449, 451, 458, 459, 460, 462, 465, 467, 470, 482, 487, 491, 494, 500, 502, 503, 505, 511, 515, 518, 519, 520, 521, 522, 531, 533, 538, 546, 551, 552, 556, 557, 565, 567, 575, 579, 582, 583, 586, 591, 593, 610, 614, 628, 631, 632, 641, 642
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#### B-2 Aquaculture

6, 12, 35, 38, 74, 76, 81, 90, 92, 97, 103, 134, 153, 155, 174, 183, 184, 188, 198, 215, 226, 236, 242, 259, 260, 272, 283, 300, 312, 315, 319, 330, 344, 349, 352, 363, 369, 376, 394, 400, 404, 416, 418, 428, 429, 443, 456, 458, 469, 476, 480, 483, 492, 497, 501, 513, 521, 522, 524, 528, 550, 564, 577, 593, 607, 627

# B-3 Bioacoustics

183, 395

# B-4 Biogenography

41, 46, 58, 91, 101, 108, 142, 170, 183, 196, 233, 241, 270, 292, 341, 405, 406, 410, 427, 442, 445, 474, 481, 494, 592, 599

# B-5 Biology of Fishes

8, 15, 21, 27, 53, 93, 108, 119, 122, 133, 142, 143, 151, 181, 183, 199, 206, 210, 235, 240, 274, 285, 295, 300, 302, 312, 324, 341, 342, 357, 388, 393, 405, 409, 411, 416, 444, 447, 454, 458, 462, 463, 466, 468, 475, 479, 499, 505, 506, 510, 521, 532, 535, 543, 561, 567, 573, 593, 596, 616, 617, 618

# B-6 Botany

25, 58, 60, 86, 114, 146, 171, 195, 213, 230, 233, 243, 245, 251, 259, 275, 282, 291, 292, 297, 299, 306, 355, 365, 392, 393, 396, 426, 428, 432, 472, 504, 525, 540, 543, 545, 546, 549, 559, 562, 576, 580, 583, 602, 609, 633, 635, 636, 639,

#### B-7 Cold Water Biology

40, 184, 203, 348, 474

Maria Maria

# B-ò-ästuarine Ecology

12, 13, 15, 16, 20. 21, 23, 24, 26, 30, 33, 35, 41, 43, 44, 45, 48, 51, 53, 54, 56, 57, 65, 46, 59, 64, 70, 74, 76, 77, 71, 72, 78. 79. 81, 86, 93, 95, 96, 98. 82, 87, 89, 97, 100. 101, 104, 107, 109, 111, 112, 116, 118, 120, 121. 122, 126, 127, 128, 131, 133, 134, 136, 137, 138, 139, 144, 146, 147, 151, 152, 153, 155, 157, 161, 162, 164, 165, 171, 172, 176, 179, 181, 183, 186, 187, 189, 190, 191, 192, 193, 196, 197, 198, 199, 201, 202, 206, 209, 210, 218, 222, 224, 225, 228, 232, 234, 235, 236, 238, 240, 242, 243, 245, 247, 248, 251, 252, 253, 256, 257, 266, 271, 277, 279, 283, 287, 288, 289, 291, 293, 297, 300, 301, 304, 305, 309, 310, 313, 314, 316, 317, 318, 321, 325, 330, 334, 336, 338, 340, 343, 345, 346, 347, 354, 355, 361, 362, 363, 364, 365, 368, 369, 371, 374, 376, 378, 379, 380, 381, 404, 385, 389, 390, 391, 392, 393, 396, 397, 403, 407, 408, 414, 416, 418, 420, 421, 422, 426, 427, 431, 432, 433, 440, 441, 443, 445, 448, 451, 455, 459, 460, 462, 463, 464, 465, 466, 467, 470, 471, 472, 476, 483, 485, 487, 492, 494, 496, 499, 510, 514, 518, 520, 521, 524, 528, 531, 532, 534, 537, 540, 545, 551, 552, 553, 561, 563, 533, 565, 566, 567, 570, 571, 574, 575, 576, 577, 579, 581, 582, 584, 586, 587, 590, 591, 593, 594, 596, 597, 598, 599, 601, 602, 606, 609, 611, 614, 620, 621, 623, 624, 630, 633, 634, 636, 641, 644

# B-9 Fisheries Biology

10, 12, 19, 21, 24, 43, 54, 57, 74, 76, 84, 86, 94, 95, 98, 100, 107, 109, 113, 118, 134, 140, 143, 148, 99, 151. 154, 161, 181, 183, 189, 193, 197, 206, 209, 210, 239, 249, 254, 274, 285, 289, 293, 300, 304, 309, 312, 316, 321, 323, 326, 330, 338, 341, 345, 370, 376, 378, 385, 414, 415, 416, 420, 421, 425. 430, 431, 433, 436, 438, 440, 447, 455, 460, 462, 463, 466, 468, 469, 471, 473, 475, 482, 483, 484, 491, 500, 506, 508, 511, 515, 521, 531, 532, 541, 543, 547, 553, 573, 582, 593, 616, 617, 618, 625, 629, 638

B-10 Health & Medicine

17, 66, 141, 185, 294, 615

B-11 Human Ecology

17, 202, 524, 546

B-12 Invertebrate Biology

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2, 3, 8, 12, 18, 19, 22, 27, 33, 39, 40, 45, 46, 47, 66, 67, 69, 76, 77, 78, 82, 91, 92, 93, 97, 101, 104, 117, 119, 124, 125, 132, 139, 153, 155, 160, 162, 166, 167, 170, 173, 186, 188, 190, 192, 205, 211, 212, 213, 222, 224, 226, 228, 232, 237, 244, 247, 248, 255, 261, 283, 287, 288, 289, 301, 302, 303, 305, 309, 311, 314, 318, 325, 330, 335, 339, 352, 353, 368, 369, 371, 378, 379, 381, 383, 384, 389, 390, 394, 395, 398, 406, 407, 418, 422, 423, 427, 429, 430, 438, 439, 441, 442, 445, 448, 451, 459, 465, 467, 469, 474, 476, 478, 479, 480, 481, 487, 491, 494, 495, 496, 497, 500, 501, 502, 503, $13, 515, 518, 521, 524, 528, 535, 536, 539, 542, 547, 551, 552, 553, 556, 557, 566, 569, 572, 576, 581, 590, 591, 592, 598, 599, 614, 620, 629, 642
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B-13 Microbiology

8, 17, 20, 25, 63, 65, 88, 93, 105, 110, 112, 115, 119, 120, 121, 164, 172, 177, 221, 225, 250, 262, 276, 282, 297, 298, 299, 302, 317, 318, 375, 396, 403, 428, 432, 438, 484, 514, 544, 572, 574, 577, 593, 624, 631, 637

B-14 Ornithology

44, 72, 199, 255, 298, 328, 377, 395, 477, 507, 545, 576, 600, 612

B-15 Parasitology

27, 93, 119, 122, 160, 167, 195, 197, 223, 250, 298, 302, 305, 315, 348, 371, 411, 431, 438, 500, 517, 542, 555, 581, 644

## B-16 Physiology

22, 30, 53, 68, 99, 118, 145, 160, 166, 195, 212, 216, 222, 240, 254, 256, 289, 301, 318, 321, 327, 332, 334, 382, 391, 409, 426, 444, 451, 454, 470, 479, 538, 569, 575, 586, 601

# B-17 Plankton Ecology

8, 15, 35, 45, 47, 55, 56, 60, 67, 80, 88, 117, 121, 129, 135, 137, 145, 151, 152, 154, 158, 171, 172, 182, 195, 201, 209, 212, 218, 221, 225, 230, 235, 238, 242, 261, 262, 269, 278, 279, 285, 301, 309, 310, 317, 318, 327, 339, 340, 348, 352, 354, 357, 365, 370, 389, 397, 399, 400, 401, 406, 437, 448, 485, 492, 497, 499, 512, 524, 527, 530, 533, 551, 559, 566, 577, 579, 583, 606, 608, 618, 623, 634, 635, 637, 639, 643

## B-18 Population Dynamics

2, 10, 35, 49, 54, 55, 65, 71, 75, 88, 95, 99, 113, 132, 134, 141, 151, 154, 162, 163, 172, 189, 196, 201, 202, 205, 210, 234, 236, 238, 249, 253, 255, 267, 300, 301, 308, 318, 326, 335, 342, 363, 377, 383, 388, 393, 414, 416, 427, 433, 436, 452, 468, 473, 477, 482, 493, 539, 571, 578, 608, 612, 617, 621, 625

## B-19 Productivity

35, 37, 48, 56, 113, 116, 121, 134, 138, 145, 146, 171, 172, 176, 184, 218, 251, 262, 278, 279, 280, 310, 318, 327, 343, 348, 354, 362, 364, 392, 397, 400, 403, 407, 416, 425, 428, 437, 472, 492, 524, 527, 530, 534, 540, 545, 562, 571, 595, 606, 623, 634, 635, 637

# B-20 Vertebrate Biology

72, 93, 267, 274, 324, 452, 462, 464, 506, 593, 594

# C Chemical Sciences

#### C-1 Marine Chemistry (general)

4, 8, 35, 42, 51, 128, 158, 169, 204, 257, 281, 301, 313, 330, 332, 333, 350, 351, 360, 363, 492, 537, 588, 597, 626, 630, 632

and married .

C-2 Biochemistry

22, 34, 35, 39, 40, 68, 115, 121, 269, 276, 283, 310, 306, 311, 391, 402, 408, 423, 432, 454, 496, 560, 577, 601, 643

C-3 Geochemistry

4, 36, 207, 276, 351, 529, 537, 539, 560

C-4 Hydrography

78, 127, 159, 372, 488, 521, 560, 578, 591, 606, 634

C-5 Inorganic Chemistry

48, 115, 351, 360

C-6 Organic Chemistry

35, 121, 246, 504, 529, 626

C-7 Pesticide Monitoring

15, 18, 70, 119, 156, 281, 302, 328, 363, 402, 488, 521, 571, 500, 596, 626, 635

C-8 Seaweed Chemistry

34, 171, 427, 577, 634

C-9 Water analysis

8, 15, 36, 59, 83, 150, 157, 169, 176, 177, 179, 183, 190, 246, 271, 273, 275, 281, 301, 317, 319, 322, 343, 350, 360, 363, 386, 402, 407, 425, 488, 492, 523, 524, 571, 584, 588, 591, 606, 615, 638

D Geological Sciences

D-1 Marine Geology (general)

11, 35, 180, 404, 412, 419, 424, 450, 516, 521, 537, 546, 558

D-2 Geochemistry

62, 219, 257, 363, 537

D-3 Geochronology

537

D-4 Geological Engineering

No personnel designated this area

D-5 Geomorphology

183, 215, 461

D-6 Geophysics

168, 183

D-7 Mineralogy

537

D-8 Sedimentology

11, 14, 35, 60, 61, 165, 180, 207, 215, 330, 331, 372, 412, 424, 434, 450, 453, 488, 516, 521, 537, 558, 591, 606

D-9 Subsurface Mapping

488

#### E Interdisciplinary

E-1 Environmental Monitoring

1, 8, 16, 51, 56, 59, 70, 84, 90, 96, 100, 101, 102, 116, 123, 130, 131, 136, 137, 140, 147, 149, 152, 157, 161, 168, 173, 175, 185, 191, 207, 215, 220, 232, 234, 245, 247, 252, 260, 265, 266, 267, 268, 270, 273, 294, 301, 309, 317, 318, 319, 322, 323, 329, 335, 336, 346, 347, 363, 367, 370, 378, 398, 401, 402, 406, 407, 416, 446, 452, 461, 477, 488, 492, 498, 504, 509, 512, 521, 524, 541, 546, 571, 584, 591, 603, 611, 615, 635, 636, 640

# E-2 Oceanography

11, 24, 55, 62, 80, 97, 101, 103, 121, 129, 134, 135, 138, 150, 152, 168, 175, 180, 183, 212, 219, 244, 263, 269, 280, 291, 296, 303, 307, 317, 331, 362, 364, 386, 387, 406, 412, 415, 416, 424, 434, 442, 449, 450, 464, 481, 488, 489, 492, 498,

503, 519, 520, 535, 537, 548, 559, 585, 591, 606, 608, 628, 634, 641

#### E-3 Pollution Research

8, 20, 6, 18, 25, 26, 34, 35, 30, 36, 38, 41, 50, 56, 62, 63, 65, 68, 75, 76, 80, 83, 97, 101, 103, 112, 119, 120, 126, 130, 133, 136, 139, 141, 152, 156, 158, 166, 168, 171, 174, 177, 179, 182, 183, 185, 187, 191, 192, 196, 200, 203, 215, 219, 228, 230, 231, 232, 246, 250, 254, 257, 258, 266, 267, 268, 271, 272, 273, 278, 288, 301, 302, 311, 313, 317, 328, 329, 332, 337, 342, 350, 356, 357, 358, 359, 362, 372, 374, 375, 377, 379, 381, 382, 385, 388, 398, 401, 402, 406, 407, 408, 409, 411, 416, 422, 428, 439, 440, 441, 444, 446, 464, 480, 485, 486, 492, 493, 500, 504, 509, 514, 524, 529, 537, 546, 561, 569, 571, 572, 574, 577, 580, 584, 585, 587, 588, 591, 595, 597, 612, 621, 624, 627, 630, 632, 638, 639, 640

# F Physical Sciences

F-1 Marine Physics (general)

264, 331, 363, 622

F-2 Electrical Properties

No personnel designated this area

F-3 Hydrodynamics

32, 50, 61, 168, 174, 194, 263, 296, 307, 337, 359, 489

F-4 Physical Engineering

1, 168, 174, 194, 200, 356, 387, 607

F-5 Physical Properties

159, 174, 175, 215, 280, 322, 622

West Committee

# F-6 Thermal Properties

96, 159, 174, 214, 215, 280, 318, 356, 363, 407, 453, 521, 524, 571, 585, 595, 640

# F-7 Underwater Acoustics

52, 488, 498

#### G Related

# G-1 Data Systems

28, 31, 75, 102, 144, 149, 159, 163, 214, 296, 320, 347, 358, 386, 415, 446, 449, 488, 603, 629

# G-2 Environmental Legislation

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# G-5 Simulation Modeling

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# G-6 Teaching and Education

10, 28, 32, 39, 58, 63, 101, 111, 148, 168, 199, 200, 203, 204, 215, 217, 243, 251, 272, 301, 318, 326, 330, 337, 345, 356, 358, 387, 389, 419, 424, 428, 435, 489, 490, 509, 524, 542, 546, 548, 555, 564, 571, 584, 613, 622, 628, 634, 635, 639

#### G-7 Underwater Diving

7, 101, 119, 120, 183, 302, 330, 365, 383, 406, 407, 488, 524, 610, 640

# G-8 Underwater Photography

101, 183, 365, 488

#### H Resource Utilization

# H-1 Resource Economics

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# H-2 Resource Management

9, 23, 28, 35, 52, 81, 84, 87, 107, 123, 131, 163, 208, 215, 227, 229, 252, 258, 265, 284, 286, 293, 300, 308, 318, 323, 329, 330, 336, 345, 356, 358, 363, 383, 402, 404, 416, 417, 419, 435, 446, 457, 488, 501, 508, 511, 521, 522, 524, 541, 546, 554, 563, 571, 573, 589, 591, 604

# H-3 Resource Planning

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